

# POINT AND NONPOINT SOURCE CHARACTERIZATION OF THE SEQUATCHIE RIVER WATERSHED

- 4.1 Background.
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  - 4.2.G. 060200040201 (Sequatchie River)
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- **4.1. BACKGROUND.** This chapter is organized by HUC-12 subwatershed, and the description of each subwatershed is divided into four parts:
  - i. General description of the subwatershed
  - ii. Location of USGS (United States Geological Survey) gaging stations and STORET sites.
  - iii. Location of permitted activities
  - iv. Description of nonpoint source contributions

The HUC can range from 2 to 16 digits long, more digits indicating a smaller and smaller portion of the watershed is represented. The Sequatchie River Watershed (HUC 06020004) has been delineated into thirteen HUC-12 subwatersheds.

Information for this chapter was obtained from databases maintained by the Division of Water Pollution Control or provided in the WCS (Watershed Characterization System) data set. The WCS used was version 2.0 (developed by Tetra Tech, Inc for EPA Region 4) released in 2003.

WCS integrates with ArcView® v3.x and Spatial Analyst® v1.1 to analyze user-delineated (sub)watersheds based on hydrologically connected water bodies. Reports are generated by integrating WCS with Microsoft® Word. Land Use/Land Cover information from 2001 MRLC (Multi-Resolution Land Cover) data are calculated based on the proportion of county-based land use/land cover in user-delineated (sub)watersheds.

Nonpoint source data in WCS are based on agricultural census data collected 1992–1998; nonpoint source data were reviewed by Tennessee NRCS staff.

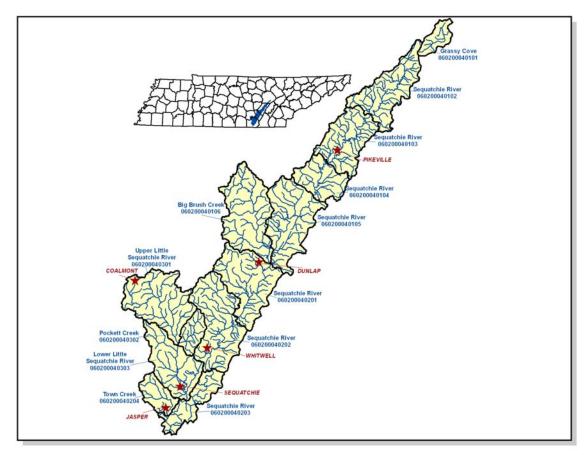


Figure 4-1. The Sequatchie River Watershed is Composed of thirteen USGS-Delineated Subwatersheds (12-Digit Subwatersheds).

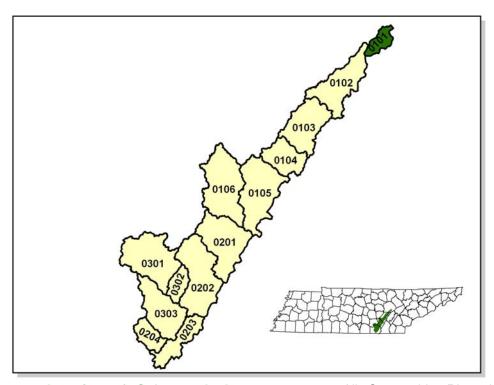
**4.2. CHARACTERIZATION OF HUC-12 SUBWATERSHEDS.** The Watershed Characterization System (WCS) software and data sets provided by EPA Region IV were used to characterize each subwatershed in the Sequatchie River Watershed.

HUC-8	HUC-10	HUC-12
		060200040101 Grassy Cove
		060200040102 Sequatchie River
	0602000401	060200040103 Sequatchie River
	0802000401	060200040104 Sequatchie River
		060200040105 Sequatchie River
		060200040106 Big Brush Creek
06020004	0000000400	060200040201 Sequatchie River
		060200040202 Sequatchie River
	0602000402	060200040203 Sequatchie River
		060200040204 Town Creek
		060200040301 Little Sequatchie River, Upper
	0602000403	060200040302 Pockett Creek
		060200040303 Little Sequatchie River, Lower

**Table 4-1. HUC-12 Drainage Areas are Nested Within HUC-10 Drainages.** NRCS worked with USGS to delineate the HUC-10 and HUC-12 drainage boundaries.

# 4.2.A. 060200040101 (Grassy Cove).

# 4.2.A.i. General Description.



**Figure 4-2. Location of Subwatershed 060200040101.** All Sequatchie River HUC-12 subwatershed boundaries are shown for reference.

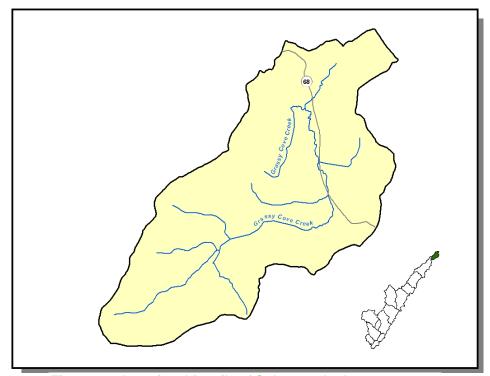


Figure 4-3. Locational Details of Subwatershed 060200040101.

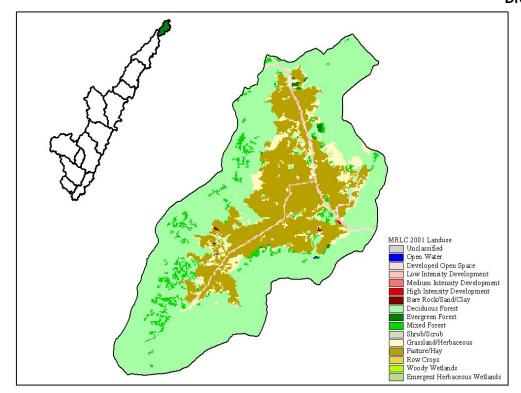


Figure 4-4. Illustration of Land Use Distribution in Subwatershed 060200040101.

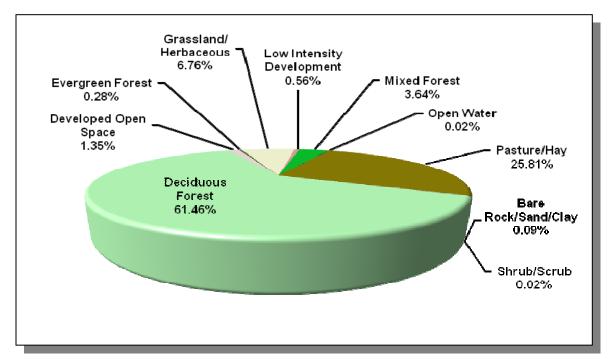


Figure 4-5. Land Use Distribution in Subwatershed 060200040101. More information is provided in Appendix IV.

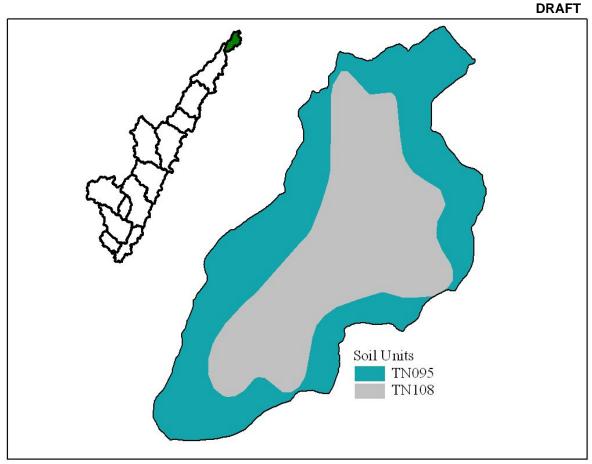


Figure 4-6. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040101.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	В	2.35	5.12	Loam	0.31
TN108	9.00	С	2.46	4.93	Loam	0.31

Table 4-2. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040101. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION					NATED PO	PULATION SHED	
County	1990	1997	2000	% of County in Watershed	1990	1997	2000	% Change (1990-2000)
Cumberland	34,736	43,217	46,802	1.96	682	848	918	34.60

Table 4-3. Population Estimates in Subwatershed 060200040101.

#### 4.2.A.ii USGS Gaging Stations and STORET Sites.

There are no USGS continuous records gaging stations located in subwatershed 060200040101.

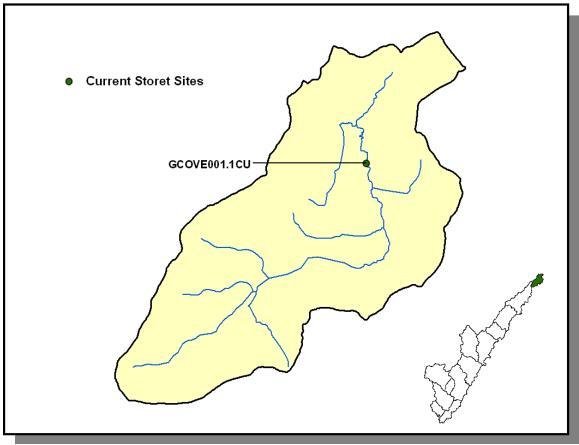


Figure 4-7. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060200040101. More information, including site names and locations, is provided in Appendix IV.

#### 4.2.A.iii. Permitted Activities.

There are no permitted activities located in subwatershed 060200040101 as of June 30th, 2007.

#### 4.2.A.iv. Nonpoint Source Contributions.

LIVESTOCK COUNTS									
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep			
Cumberland	9,468	23,179	2,296	43	6,038	461			

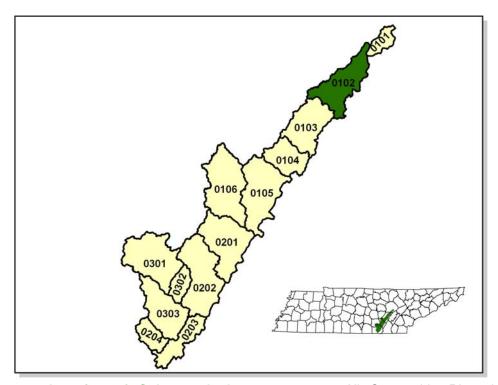
**Table 4-4. Summary of Livestock Count Estimates by County.** According to the 1997 Census of Agriculture (<a href="http://www.agcensus.usda.gov/">http://www.agcensus.usda.gov/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

CROPS	TONS/ACRE/YEAR
Other Vegetable and Truck Crop	14.05
Soybeans (Row Crops)	6.26
Corn (Row Crops)	3.77
Grass (Hayland)	3.05
Grass (Pastureland)	0.40
Grass Forbs Legumes Mixed (Pastureland)	0.26
Farmsteads and Ranch Headquarters	0.23
Legume Grass (Hayland)	0.16
Legume (Pastureland)	0.15

Table 4-5. Annual Estimated Total Soil Loss in Subwatershed 060200040101.

#### 4.2.B. 060200040102 (Sequatchie River).

#### 4.2.B.i. General Description.



**Figure 4-8. Location of Subwatershed 060200040102.** All Sequatchie River HUC-12 subwatershed boundaries are shown for reference.

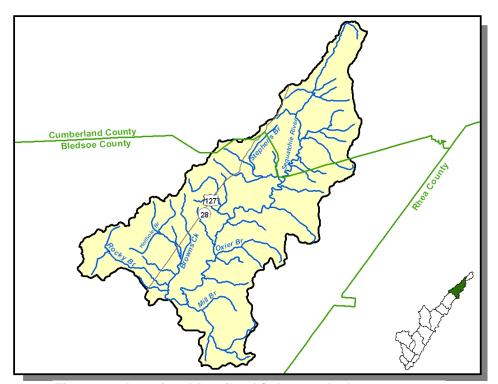


Figure 4-9. Locational Details of Subwatershed 060200040102.

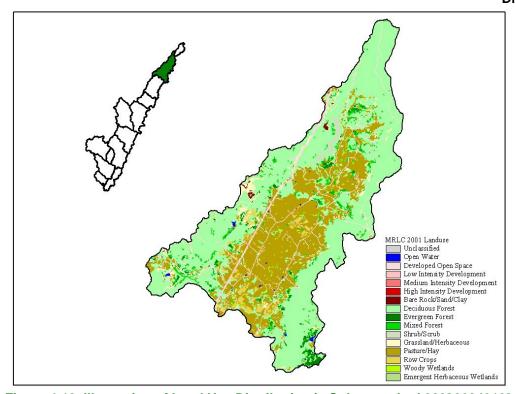


Figure 4-10. Illustration of Land Use Distribution in Subwatershed 060200040102.

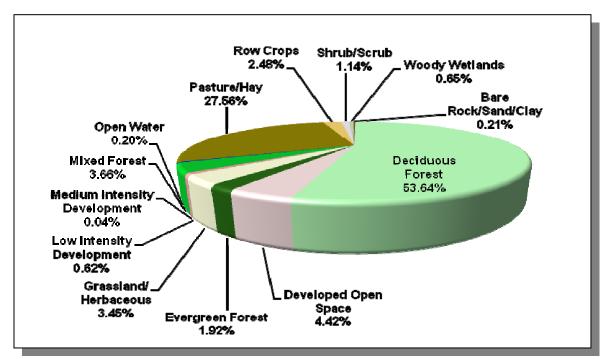


Figure 4-11. Land Use Distribution in Subwatershed 060200040102. More information is provided in Appendix IV.

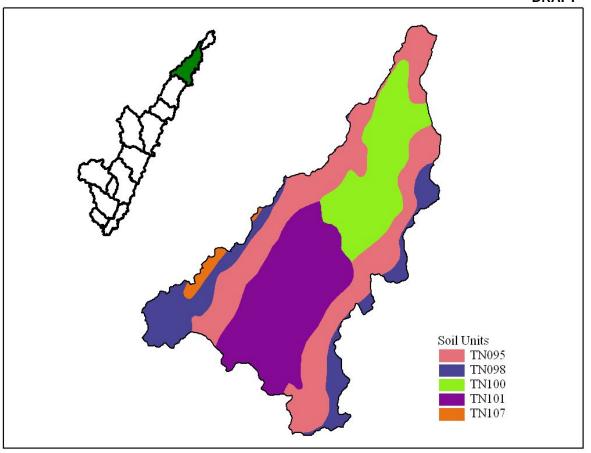


Figure 4-12. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040102.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	В	2.35	5.12	Loam	0.31
TN098	1.00	С	3.98	4.82	Loam	0.32
TN100	0.00	В	1.14	3.35	Silty Loam	0.21
TN101	0.00	В	1.71	5.39	Loam	0.35
TN107	1.00	С	6.34	4.84	Loam	0.28

Table 4-6. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040102. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION				IATED PO N WATER	PULATION SHED		
County	1990	1997	2000	% of County in Watershed	1990	1997	2000	% Change (1990-2000)
Bledsoe	9,669	10,650	12,367	10.27	993	1,094	1,271	28.00
Cumberland	34,736	43,217	46,802	1.65	573	713	772	34.70
Totals	44,405	53,867	59,169		1,566	1,807	2,043	30.50

Table 4-7. Population Estimates in Subwatershed 060200040102.

#### 4.2.B.ii USGS Gaging Stations and STORET Sites.

There are no USGS continuous records gaging stations located in subwatershed 060200040102.

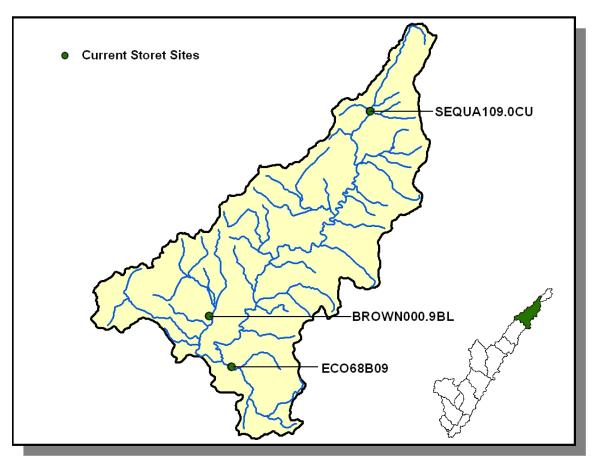


Figure 4-13. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060200040102. More information, including site names and locations, is provided in Appendix IV.

#### 4.2.B.iii. Permitted Activities.

There are no permitted activities located in subwatershed 060200040102 as of June 30th, 2007.

#### 4.2.B.iv. Nonpoint Source Contributions.

LIVESTOCK COUNTS										
County Beef Cow Cattle Milk Cow Chickens (Layers) Hogs Sheep										
Bledsoe	11,691	25,110	1,474	22	275	162				
Cumberland	9,468	23,179	2,296	43	6,038	461				

**Table 4-8. Summary of Livestock Count Estimates by County.** According to the 1997 Census of Agriculture (<a href="http://www.agcensus.usda.gov/">http://www.agcensus.usda.gov/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	INVEN	NTORY	REMOVAL RATE			
County	Forest Land Timber Land (thousand acres)		Growing Stock (million cubic feet)	Sawtimber (million board feet)		
Bledsoe	186.2	186.2	0.9	2.3		

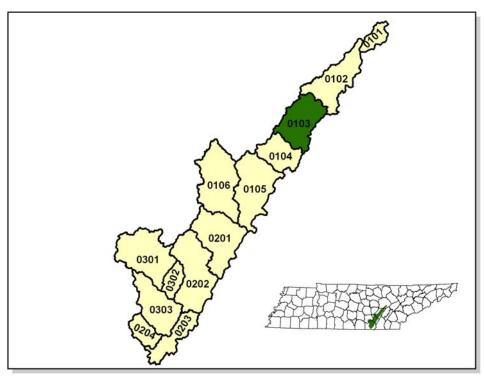
Table 4-9. Forest Acreage and Annual Removal Rates (1987-1994) by County.

CROPS	TONS/ACRE/YEAR
Other Vegetable and Truck Crop	14.05
Corn (Row Crops)	9.64
Soybeans (Row Crops)	5.15
All Other Row Crops	4.45
Wheat (Close Grown Cropland)	2.81
Conservation Reserve Program Land	1.00
Farmsteads and Ranch Headquarters	0.99
Legume Grass (Hayland)	0.95
Grass (Hayland)	0.78
Grass (Pastureland)	0.62
Grass Forbs Legumes Mixed (Pastureland)	0.48
Legume (Pastureland)	0.15

Table 4-10. Annual Estimated Total Soil Loss in Subwatershed 060200040102.

# 4.2.C. 060200040103 (Sequatchie River).

# 4.2.C.i. General Description.



**Figure 4-14. Location of Subwatershed 0602000400103** All Sequatchie River HUC-12 subwatershed boundaries are shown for reference.

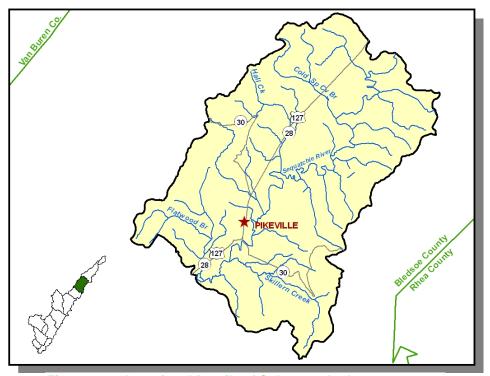


Figure 4-15. Locational Details of Subwatershed 060200040103.

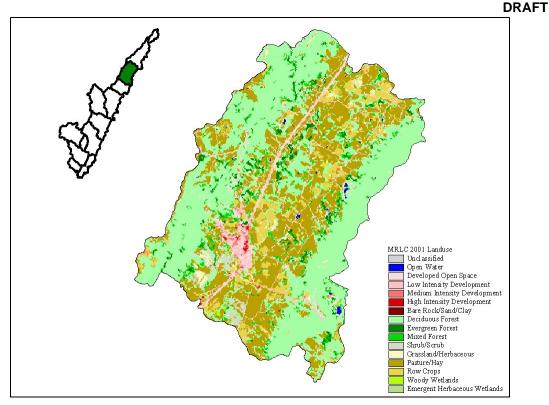


Figure 4-16. Illustration of Land Use Distribution in Subwatershed 060200040103.

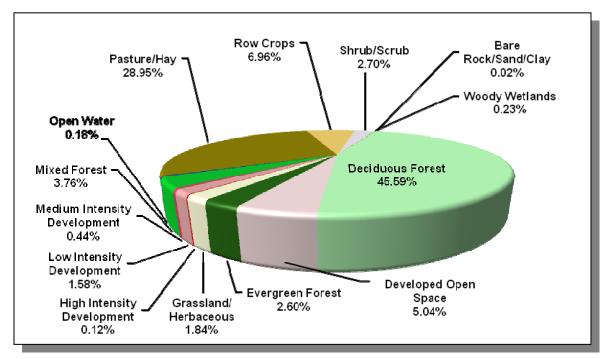


Figure 4-17. Land Use Distribution in Subwatershed 060200040103. More information is provided in Appendix IV.

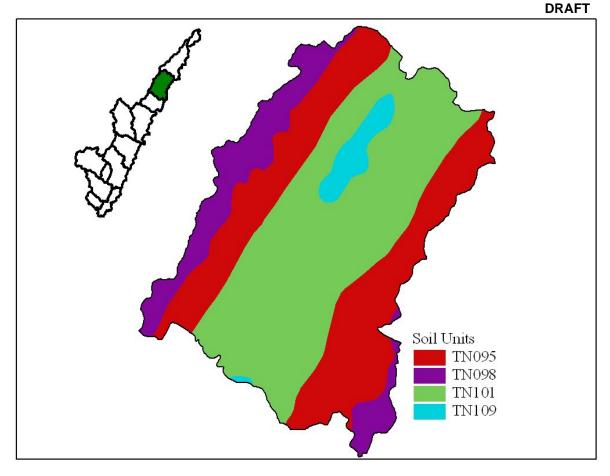


Figure 4-18. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040103.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	В	2.35	5.12	Loam	0.31
TN098	1.00	С	3.98	4.82	Loam	0.32
TN101	0.00	В	1.71	5.39	Loam	0.35
TN109	0.00	В	8.40	5.01	Sandy Loam	0.28

Table 4-11. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040103. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION				N WATER	PULATION SHED		
County	1990	1997	2000	% of County in Watershed	1990	1997	2000	% Change (1990-2000)
Bledsoe	9,669	10,650	12,367	12.33	1,192	1,313	1,525	27.90

Table 4-12. Population Estimates in Subwatershed 060200040103.

				NUMBER OF HO	<b>DUSING UNITS</b>	
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Pikeville	Bledsoe	1,771	802	640	162	0

Table 4-13. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060200040103.

#### 4.2.C.ii USGS Gaging Stations and STORET Sites.

There are no USGS continuous records gaging stations located in subwatershed 060200040103.

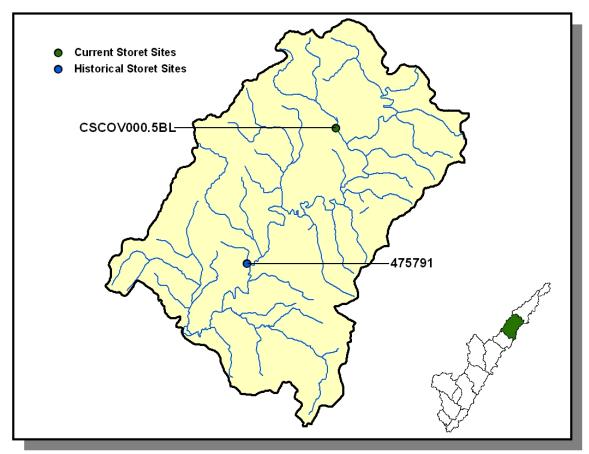


Figure 4-19. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060200040103. More information, including site names and locations, is provided in Appendix IV.

# 4.2.C.iii. Permitted Activities.

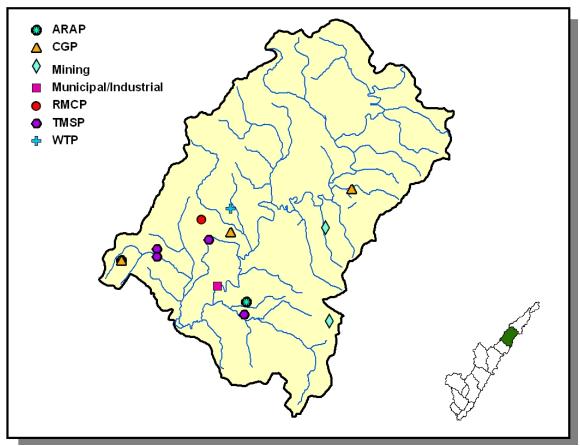


Figure 4-20. Location of Permits Issued in Subwatershed 060200040103. More information, including the names of facilities, is provided in Appendix IV.

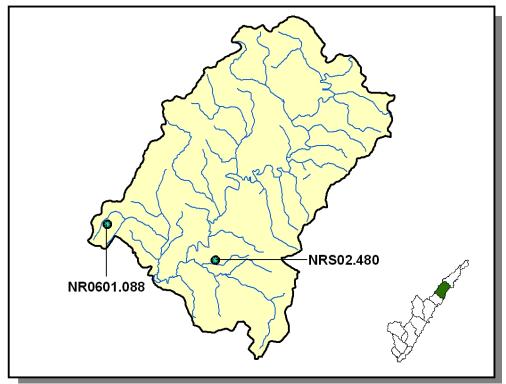


Figure 4-21. Location of ARAP (Aquatic Resource Alteration Permit) Sites in Subwatershed 060300010103. More information is provided in Appendix IV.

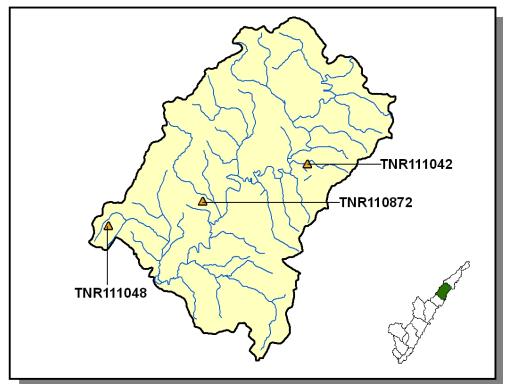


Figure 4-22. Location of CGP (Construction General Permit) Sites in Subwatershed 060300010103. More information is provided in Appendix IV.



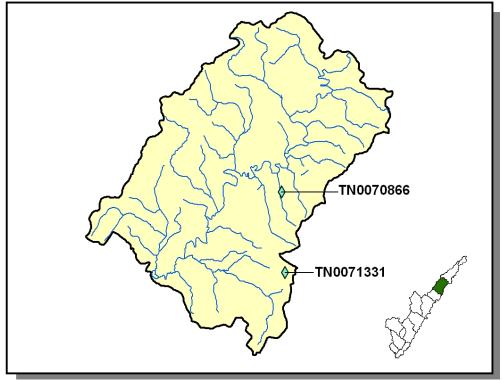


Figure 4-23. Location of permitted MINING facilities in Subwatershed 060300010103. More information is provided in Appendix IV.

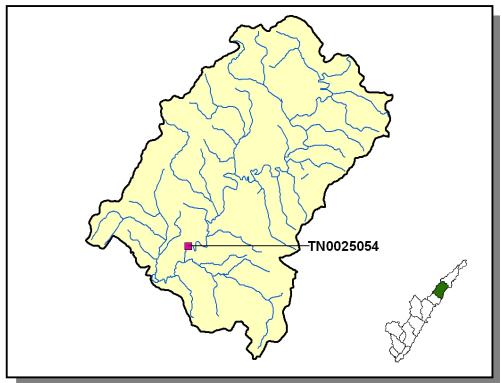


Figure 4-24. Location of permitted MUNICIPAL and INDUSTRIAL facilities in subwatershed 060300010103. More information, including the name of the facility is provided in Appendix IV.



Figure 4-25. Location of RMCP (Ready Mix Concrete Plant) facilities in Subwatershed 060300010103. More information, including the names of facilities, is provided in Appendix IV.

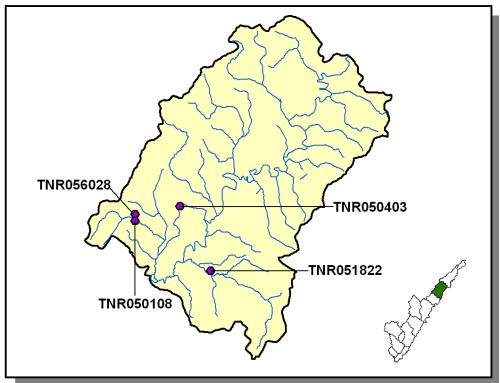


Figure 4-26. Location of TMSP (Tennessee Multi Sector Permit) Sites in Subwatershed 060300010103. More information is provided in Appendix IV.

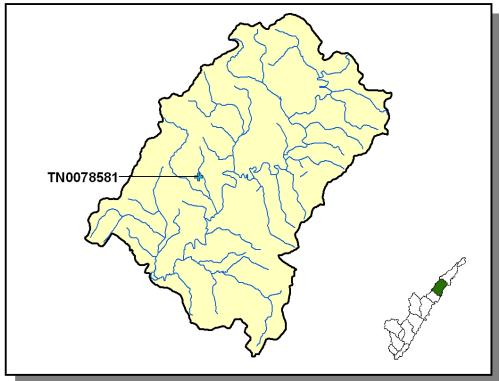


Figure 4-27. Location of Active WTP Facilities in Subwatershed 060300010103. More information, including the names of facilities, is provided in Appendix IV.

#### 4.2.C.iv. Nonpoint Source Contributions.

LIVESTOCK COUNTS							
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep	
Bledsoe	11,691	25,110	1,474	22	275	162	

Table 4-14. Summary of Livestock Count Estimates by County. According to the 1997 Census of Agriculture (http://www.agcensus.usda.gov/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	INVEN	ITORY	REMOVAL RATE		
	Forest Land Timber Land		Growing Stock	Sawtimber	
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Bledsoe	186.2	186.2	0.9	2.3	

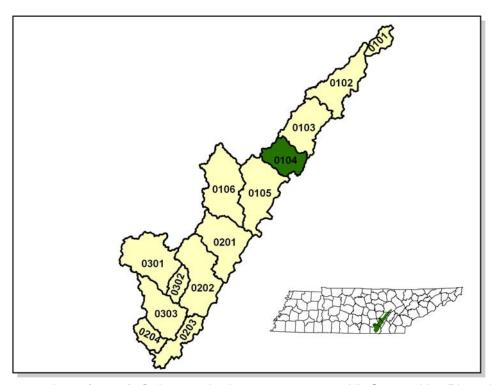
Table 4-15. Forest Acreage and Annual Removal Rates (1987-1994) by County.

CROPS	TONS/ACRE/YEAR
Corn (Row Crops)	11.22
Soybeans (Row Crops)	4.85
All Other Row Crops	4.45
Wheat (Close Grown Cropland)	2.81
Farmsteads and Ranch Headquarters	1.19
Legume Grass (Hayland)	1.16
Conservation Reserve Program Land	1.00
Grass (Pastureland)	0.68
Grass Forbs Legumes Mixed (Pastureland)	0.54
Grass (Hayland)	0.17

Table 4-16. Annual Estimated Total Soil Loss in Subwatershed 060200040103.

# 4.2.D. 060200040104 (Sequatchie River).

#### 4.2.D.i. General Description.



**Figure 4-28. Location of Subwatershed 060200040104.** All Sequatchie River HUC-12 subwatershed boundaries are shown for reference.

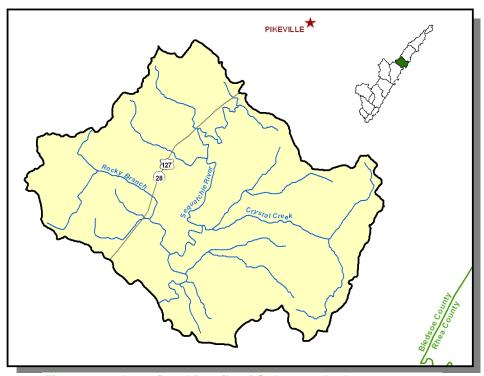


Figure 4-29. Locational Details of Subwatershed 060200040104.

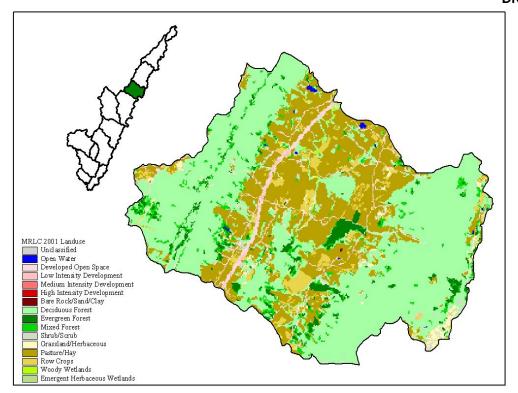


Figure 4-30. Illustration of Land Use Distribution in Subwatershed 060200040104.

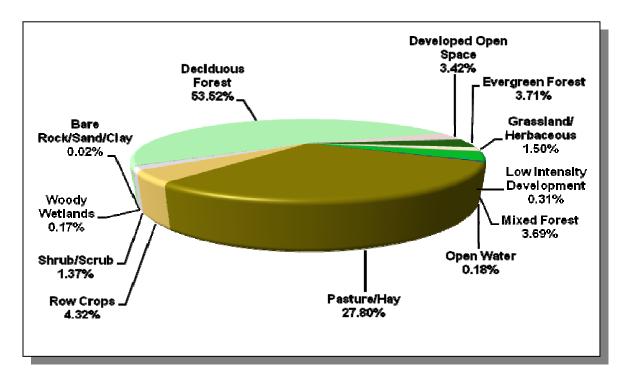


Figure 4-31. Land Use Distribution in Subwatershed 060200040104. More information is provided in Appendix IV.



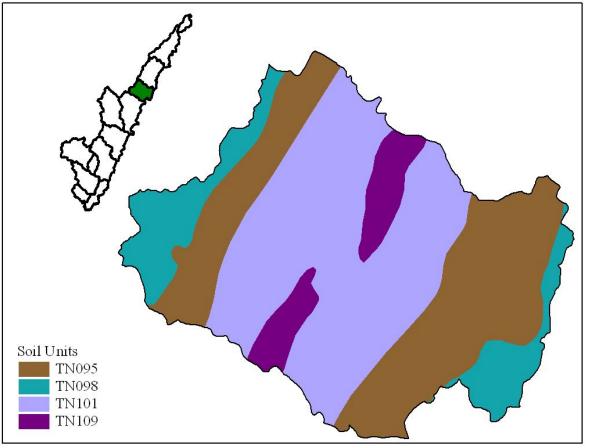


Figure 4-32. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040104.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	В	2.35	5.12	Loam	0.31
TN098	1.00	С	3.98	4.82	Loam	0.32
TN101	0.00	В	1.71	5.39	Loam	0.35
TN109	0.00	В	8.40	5.01	Sandy Loam	0.28

Table 4-17. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040104. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION			ESTIMATED POPULATION IN WATERSHED				
County	1990	1997	2000	% of County in Watershed	1990	1997	2000	% Change (1990-2000)
Bledsoe	9,669	10,650	12,367	8.04	777	856	994	27.90

Table 4-18. Population Estimates in Subwatershed 060200040104.

				NUMBER OF HO	<b>DUSING UNITS</b>	
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Pikeville	Bledsoe	1,771	802	640	162	0

Table 4-19. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060200040104.

#### 4.2.D.ii USGS Gaging Stations and STORET Sites.

There are no USGS continuous records gaging stations located in subwatershed 060200040104.

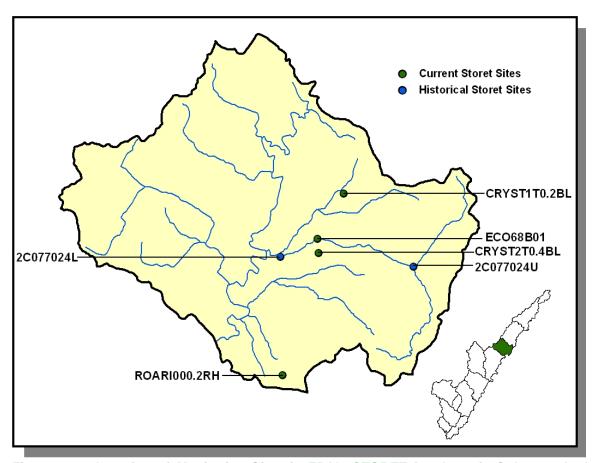


Figure 4-33. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060200040104. More information, including site names and locations, is provided in Appendix IV.

# 4.2.D,iii. Permitted Activities.

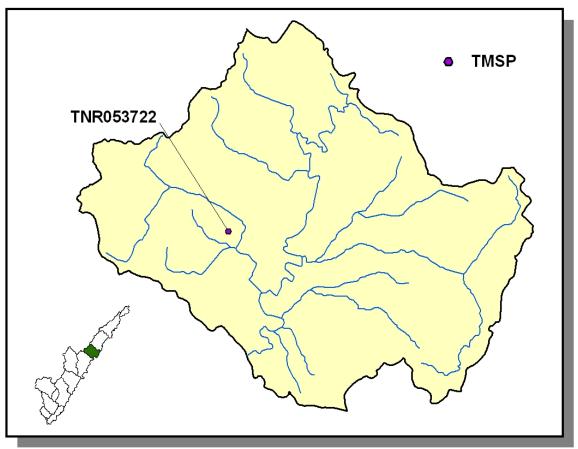


Figure 4-34. Location of Permits Issued in Subwatershed 060200040104. More information, including the names of facilities, is provided in Appendix IV.

#### 4.2.D.iv. Nonpoint Source Contributions.

LIVESTOCK COUNTS							
County Beef Cow Cattle Milk Cow Chickens (Layers) Hogs Sheep						Sheep	
Bledsoe	11,691	25,110	1,474	22	275	162	

**Table 4-20. Summary of Livestock Count Estimates by County.** According to the 1997 Census of Agriculture (<a href="http://www.agcensus.usda.gov/">http://www.agcensus.usda.gov/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	INVEN	ITORY	REMOVAL RATE		
County	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)	
Bledsoe	186.2	186.2	0.9	2.3	

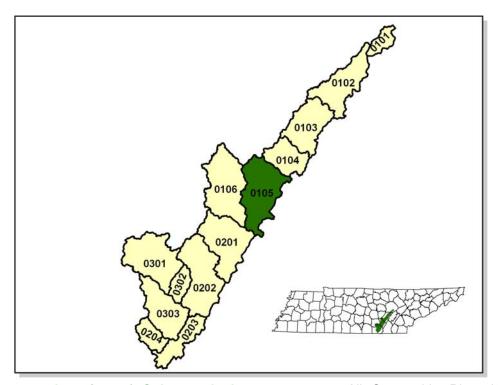
Table 4-21. Forest Acreage and Annual Removal Rates (1987-1994) by County.

CROPS	TONS/ACRE/YEAR
Corn (Row Crops)	11.22
Soybeans (Row Crops)	4.85
All Other Row Crops	4.45
Wheat (Close Grown Cropland)	2.81
Farmsteads and Ranch Headquarters	1.19
Legume Grass (Hayland)	1.16
Conservation Reserve Program Land	1.00
Grass (Pastureland)	0.68
Grass Forbs Legumes Mixed (Pastureland)	0.54
Grass (Hayland)	0.17

Table 4-22. Annual Estimated Total Soil Loss in Subwatershed 060200040104.

# 4.2.E. 060200040105 (Sequatchie River).

# 4.2.E.i. General Description.



**Figure 4-35. Location of Subwatershed 060200040105.** All Sequatchie River HUC-12 subwatershed boundaries are shown for reference.

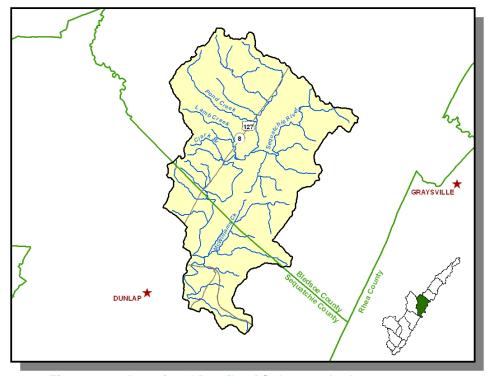


Figure 4-36. Locational Details of Subwatershed 060200040105.

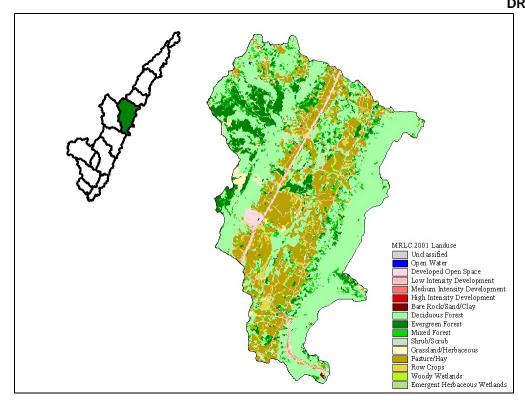


Figure 4-37. Illustration of Land Use Distribution in Subwatershed 060200040105.

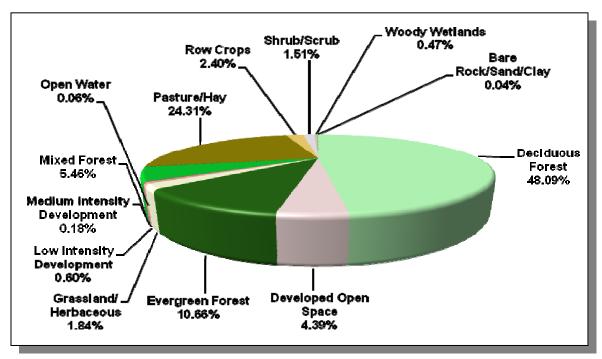


Figure 4-38. Land Use Distribution in Subwatershed 060200040105. More information is provided in Appendix IV.



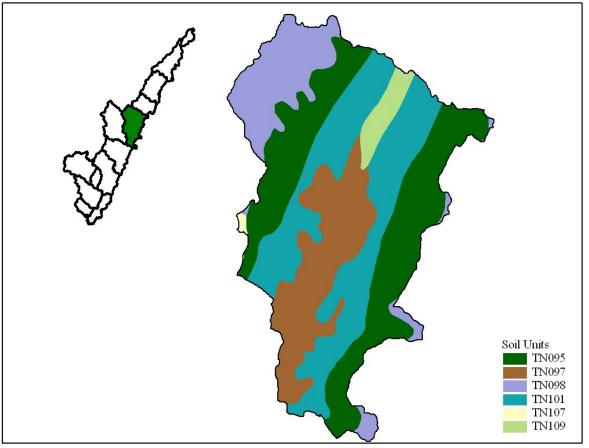


Figure 4-39. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040105.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
			,	•		
TN095	0.00	В	2.35	5.12	Loam	0.31
TN097	0.00	В	1.62	5.55	Loam	0.32
TN098	1.00	С	3.98	4.82	Loam	0.32
TN101	0.00	В	1.71	5.39	Loam	0.35
TN107	1.00	С	6.34	4.84	Loam	0.28
TN109	0.00	В	8.40	5.01	Sandy Loam	0.28

Table 4-23. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040105. The definition of "Hydrologic Group" is provided in Appendix IV.

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	COUNTY POPULATION				N WATER	PULATION SHED		
County	1990	1997	2000	% of County in Watershed	1990	1997	2000	% Change (1990-2000)
-								
Bledsoe	9,669	10,650	12,367	11.51	1,113	1,226	1,424	27.90
Sequatchie	8,863	10,119	11,370	7.43	659	752	845	28.20
Totals	18,532	20,769	23,737		1,772	1,978	2,269	28.00

Table 4-24. Population Estimates in Subwatershed 060200040105.

				NUMBER OF HO	<b>DUSING UNITS</b>	
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Dunlap	Sequatchie	3,731	1,501	591	896	14

Table 4-25. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060200040105.

#### 4.2.E.ii USGS Gaging Stations and STORET Sites.

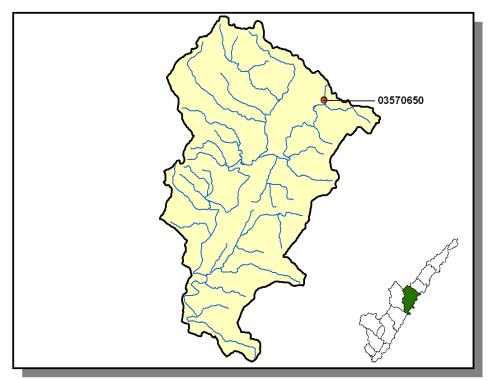


Figure 4-40. Location of USGS Continuous Record Gaging Stations in Subwatershed 060200040105. More information is provided in Appendix IV.

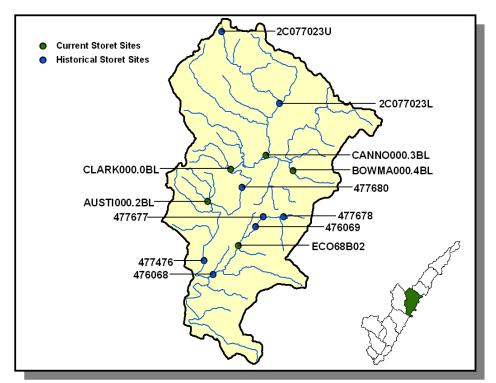


Figure 4-41. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060200040105. More information, including site names and locations, is provided in Appendix IV.

## 4.2.E.iii. Permitted Activities.

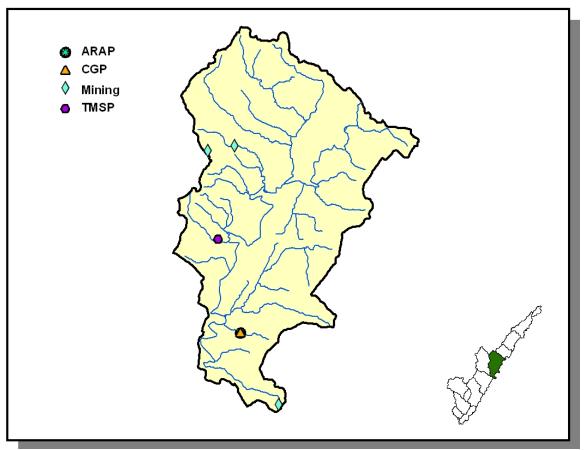


Figure 4-42. Location of Permits Issued in Subwatershed 060200040105. More information, including the names of facilities, is provided in Appendix IV.

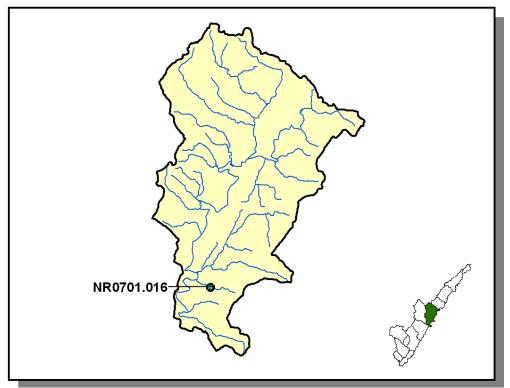


Figure 4-43. Location of ARAP (Aquatic Resource Alteration Permit) Sites in Subwatershed 060300010105. More information is provided in Appendix IV.

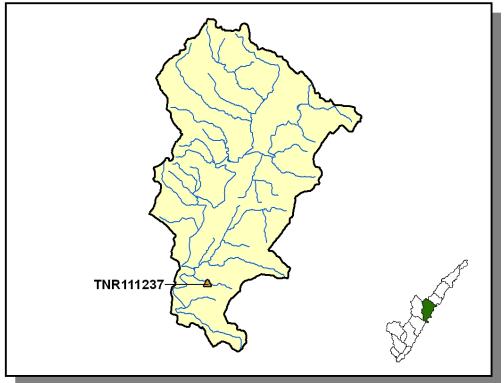


Figure 4-44. Location of CGP (Construction General Permit) Sites in Subwatershed 060300010105. More information is provided in Appendix IV.

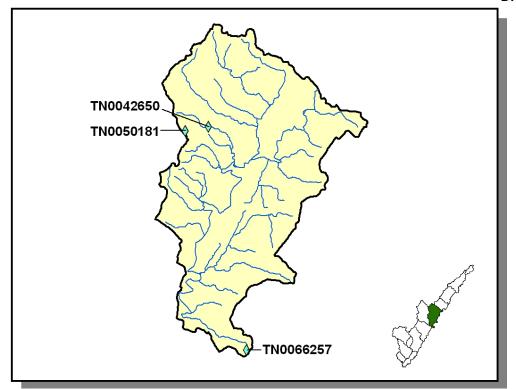


Figure 4-45. Location of permitted MINING facilities in Subwatershed 060300010105. More information is provided in Appendix IV.

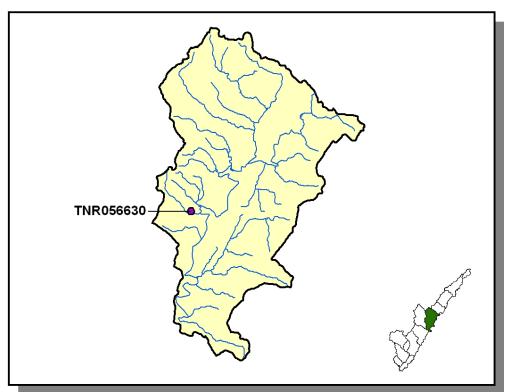


Figure 4-46. Location of TMSP (Tennessee Multi Sector Permit) Sites in Subwatershed 060300010105. More information is provided in Appendix IV.

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#### 4.2.E.iv. Nonpoint Source Contributions.

LIVESTOCK COUNTS									
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep			
Bledsoe	11,691	25,110	1,474	22	275	162			
Sequatchie	2,763	6,739	221	6					

Table 4-26. Summary of Livestock Count Estimates by County. According to the 1997 Census of Agriculture (<a href="http://www.agcensus.usda.gov/">http://www.agcensus.usda.gov/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	INVEN	ITORY	REMOVAL RATE		
	Forest Land	Timber Land	Growing Stock	Sawtimber	
County	(thousand acres) (thousand acres)		(million cubic feet)	(million board feet)	
Bledsoe	186.2	186.2	0.9	2.3	

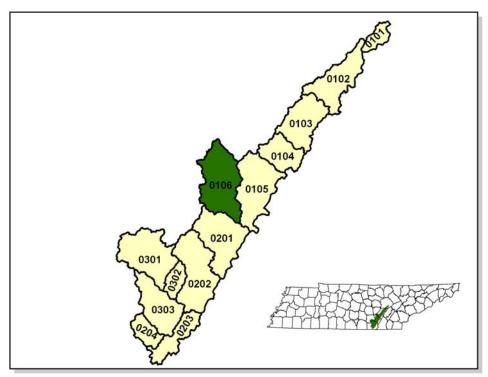
Table 4-27. Forest Acreage and Annual Removal Rates (1987-1994) by County.

CROPS	TONS/ACRE/YEAR
Corn (Row Crops)	8.64
Soybeans (Row Crops)	4.85
All Other Row Crops	4.45
Wheat (Close Grown Cropland)	2.81
Conservation Reserve Program Land	1.00
Legume Grass (Hayland)	0.88
Farmsteads and Ranch Headquarters	0.87
Grass (Pastureland)	0.80
Grass Forbs Legumes Mixed (Pastureland)	0.72
Grass (Hayland)	0.26

Table 4-28. Annual Estimated Total Soil Loss in Subwatershed 060200040105.

## 4.2.F. 060200040106 (Big Brush Creek).

#### 4.2.F.i. General Description.



**Figure 4-47. Location of Subwatershed 060200040106.** All Sequatchie River HUC-12 subwatershed boundaries are shown for reference.

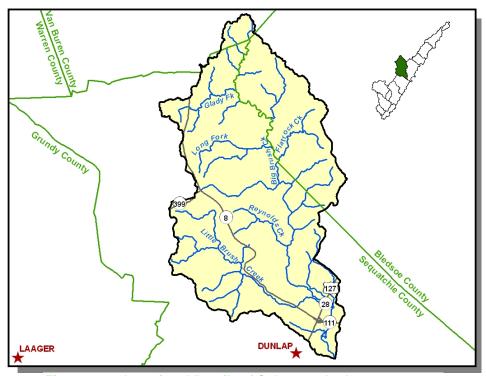


Figure 4-48. Locational Details of Subwatershed 060200040106.

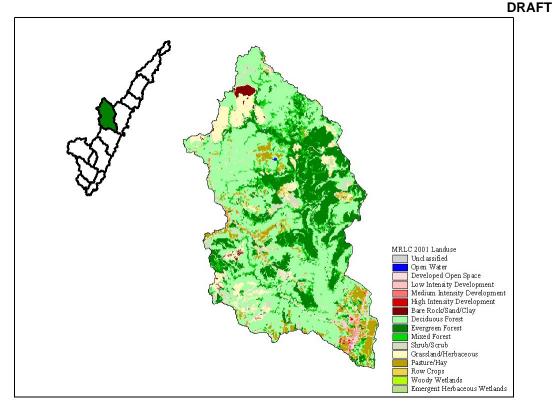


Figure 4-49. Illustration of Land Use Distribution in Subwatershed 060200040106.

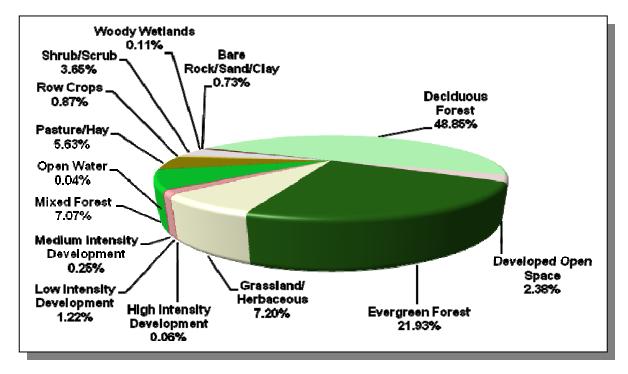


Figure 4-50. Land Use Distribution in Subwatershed 060200040106. More information is provided in Appendix IV.

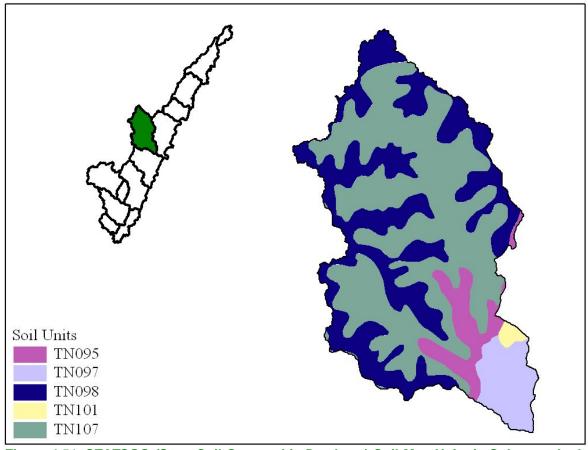


Figure 4-51. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040106.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	В	2.35	5.12	Loam	0.31
TN097	0.00	В	1.62	5.55	Loam	0.32
TN098	1.00	С	3.98	4.82	Loam	0.32
TN101	0.00	В	1.71	5.39	Loam	0.35
TN107	1.00	С	6.34	4.84	Loam	0.28

Table 4-29. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040106. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION			ESTIMATED POPULATION IN WATERSHED				
County	1990	1997	2000	% of County in Watershed	1990	1997	2000	% Change (1990-2000)
Bledsoe	9,669	10,650	12,367	3.23	312	344	399	27.9
Sequatchie	8,863	10,119	11,370	21.09	1,869	2,134	2,398	28.3
Van Buren	4,846	5,060	5,508	0.34	17	17	19	11.8
Totals	23,378	25,829	29,245		2,198	2,495	2,816	28.1

Table 4-30. Population Estimates in Subwatershed 0602000400106

				NUMBER OF HO	USING UNITS	
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Dunlap	Sequatchie	3,731	1,501	591	896	14

Table 4-31. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060200040106.

#### 4.2.F.ii USGS Gaging Stations and STORET Sites.

There are no USGS continuous record gaging stations located in subwatershed 060200040106.

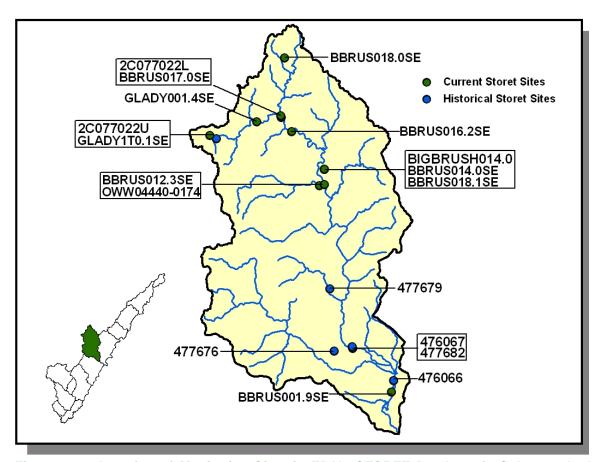


Figure 4-52. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060200040106. More information, including site names and locations, is provided in Appendix IV.

## 4.2.F.iii. Permitted Activities.

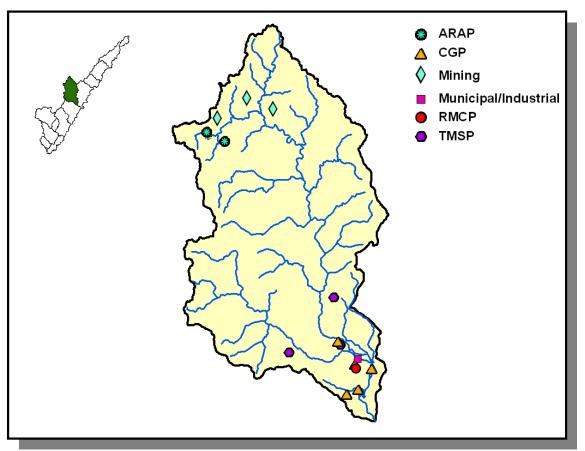


Figure 4-53. Location of Permits Issued in Subwatershed 060200040106. More information, including the names of facilities, is provided in Appendix IV.

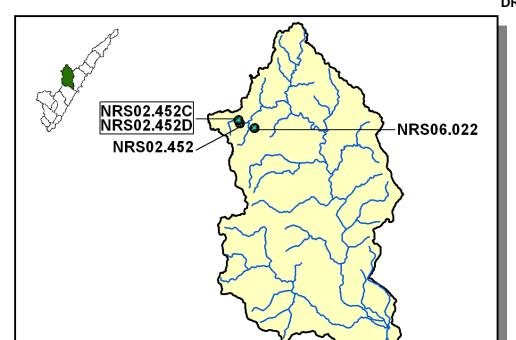


Figure 4-54. Location of ARAP (Aquatic Resource Alteration Permit) Sites in Subwatershed 060300010106. More information is provided in Appendix IV.

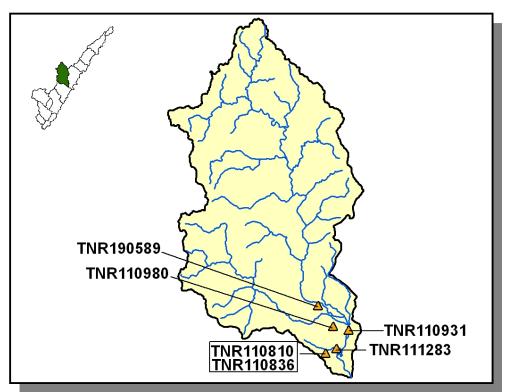


Figure 4-55. Location of CGP (Construction General Permit) Sites in Subwatershed 060300010106. More information is provided in Appendix IV.

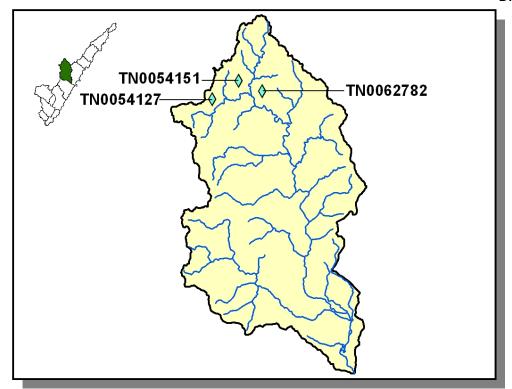


Figure 4-56. Location of permitted MINING facilities in Subwatershed 060300010106. More information is provided in Appendix IV.

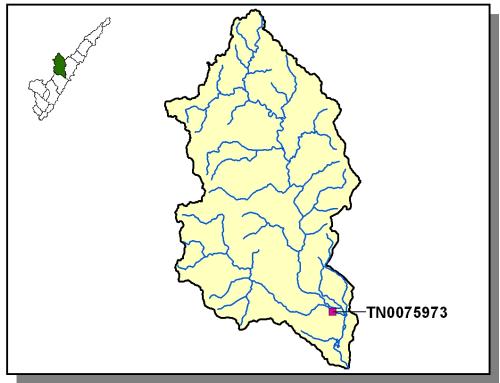


Figure 4-57. Location of permitted MUNICIPAL and INDUSTRIAL facilities in subwatershed 060300010106. More information, including the name of the facility is provided in Appendix IV.

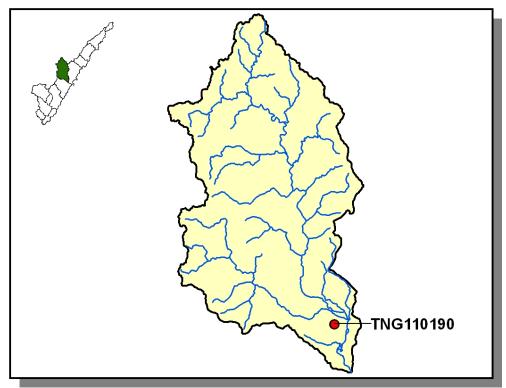


Figure 4-58. Location of RMCP (Ready Mix Concrete Plant) facilities in Subwatershed 060300010106. More information, including the names of facilities, is provided in Appendix IV.

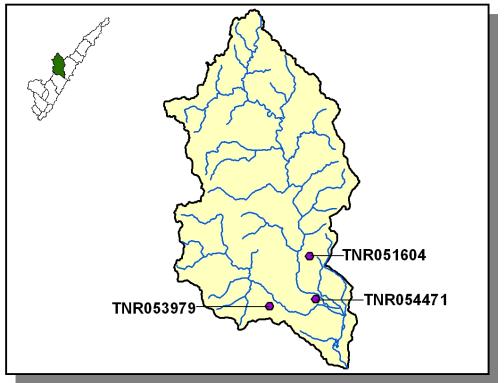


Figure 4-59. Location of TMSP (Tennessee Multi Sector Permit) Sites in Subwatershed 060300010106. More information is provided in Appendix IV.

# 4.2.F.iv. Nonpoint Source Contributions.

	LIVESTOCK COUNTS									
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep				
Bledsoe	11,691	25,110	1,474	22	275	162				
Sequatchie	2,763	6,739	221	6						
Van Buren	3,669	7,876	412	7						

Table 4-32. Summary of Livestock Count Estimates by County. According to the 1997 Census of Agriculture (<a href="http://www.agcensus.usda.gov/">http://www.agcensus.usda.gov/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	INVEN	NTORY	REMOVAL RATE		
County	Forest Land Timber Land (thousand acres)		Growing Stock (million cubic feet)	Sawtimber (million board feet)	
Bledsoe	186.2	186.2	0.9	2.3	
Van Buren	145.0	135.4	2.3	9.5	

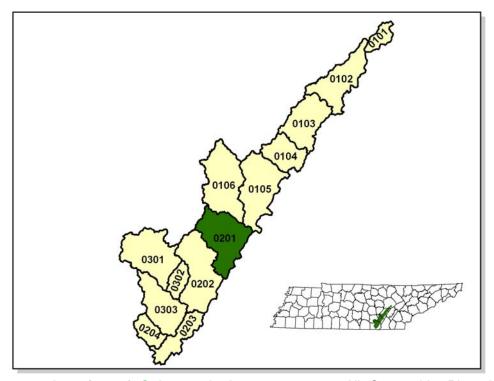
Table 4-33. Forest Acreage and Annual Removal Rates (1987-1994) by County.

CROPS	TONS/ACRE/YEAR
Soybeans (Row Crops)	4.85
All Other Row Crops	4.45
Corn (Row Crops)	4.15
Other (Horticultural)	3.72
Wheat (Close Grown Cropland)	2.81
Grass Forbs Legumes Mixed (Pastureland)	1.02
Grass (Pastureland)	1.01
Conservation Reserve Program Land	1.00
Grass (Hayland)	0.41
Legume Grass (Hayland)	0.40
Farmsteads and Ranch Headquarters	0.32

Table 4-34. Annual Estimated Total Soil Loss in Subwatershed 0602000400106

## 4.2.G. 060200040201 (Sequatchie River).

#### 4.2.G.i. General Description.



**Figure 4-60. Location of Subwatershed 060200040201.** All Sequatchie River HUC-12 subwatershed boundaries are shown for reference.

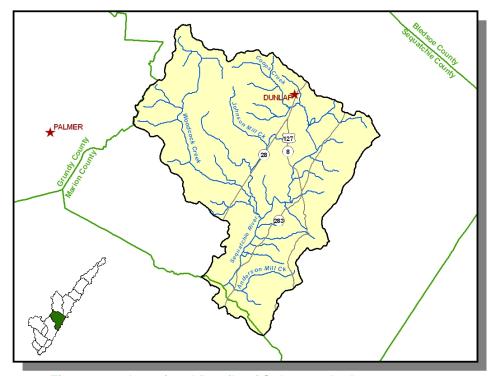


Figure 4-61. Locational Details of Subwatershed 060200040201.

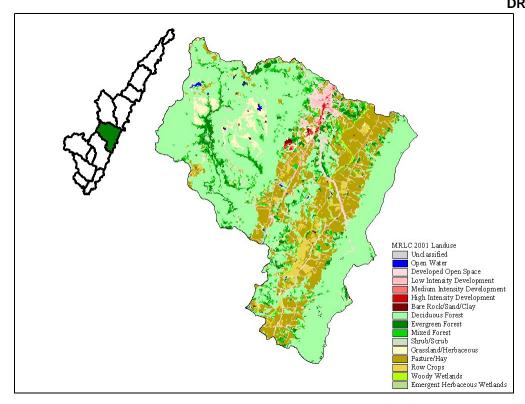


Figure 4-62. Illustration of Land Use Distribution in Subwatershed 060200040201.

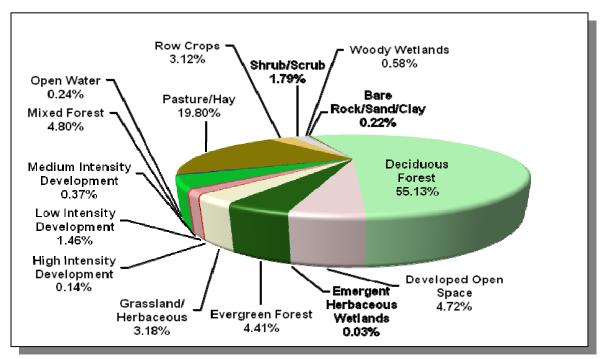


Figure 4-63. Land Use Distribution in Subwatershed 060200040201. More information is provided in Appendix IV.

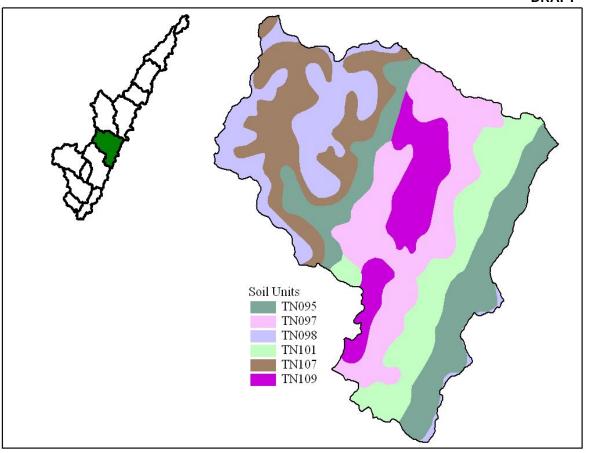


Figure 4-64. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040201.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
		0.100.	(,)	<b>P</b>		
TN095	0.00	В	2.35	5.12	Loam	0.31
TN097	0.00	В	1.62	5.55	Loam	0.32
TN098	1.00	С	3.98	4.82	Loam	0.32

Table 4-35. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040201. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION			ESTIMATED POPULATION IN WATERSHED				
County	1990	1997	2000	% of County in Watershed	1990	1997	2000	% Change (1990-2000)
Marion	24,860	26,674	27,776	0.50	125	134	139	11.20
Sequatchie	8,863	10,119	11,370	22.69	2,011	2,296	2,580	28.30
Totals	33,723	36,793	39,146		2,136	2,430	2,719	27.30

Table 4-36. Population Estimates in Subwatershed 060200040201.

				NUMBER OF HO	<b>DUSING UNITS</b>	
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Dunlap	Sequatchie	3,731	1,501	591	896	14

Table 4-37. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060200040201.

#### 4.2.G.ii USGS Gaging Stations and STORET Sites.

There are no USGS continuous record gaging stations located in subwatershed 060200040201.

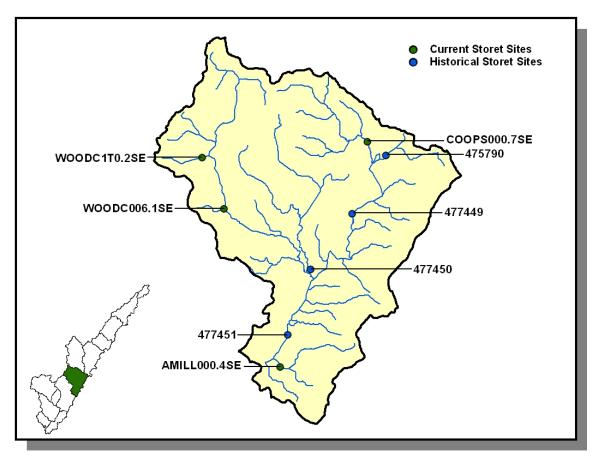


Figure 4-65. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060200040201. More information, including site names and locations, is provided in Appendix IV.

# 4.2.G.iii. Permitted Activities.

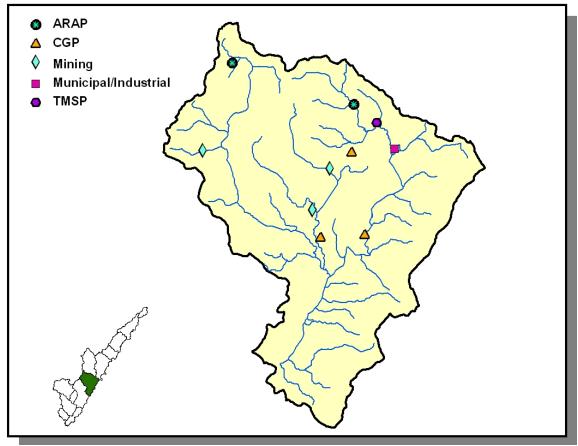


Figure 4-66. Location of Permits Issued in Subwatershed 060200040201. More information, including the names of facilities, is provided in Appendix IV.

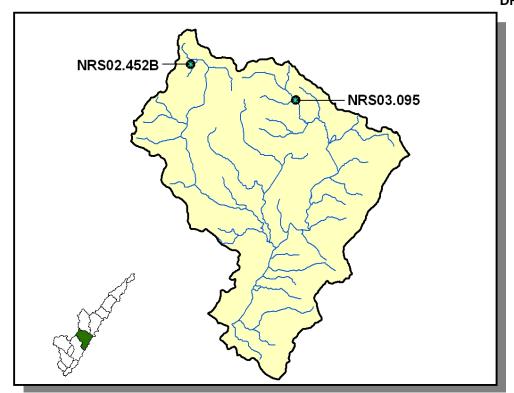


Figure 4-67. Location of ARAP (Aquatic Resource Alteration Permit) Sites in Subwatershed 060300010201. More information is provided in Appendix IV.

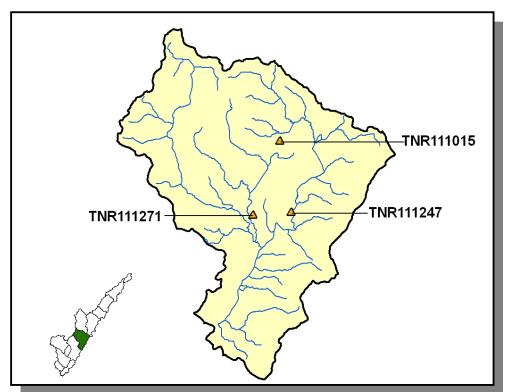


Figure 4-68. Location of CGP (Construction General Permit) Sites in Subwatershed 060300010201. More information is provided in Appendix IV.

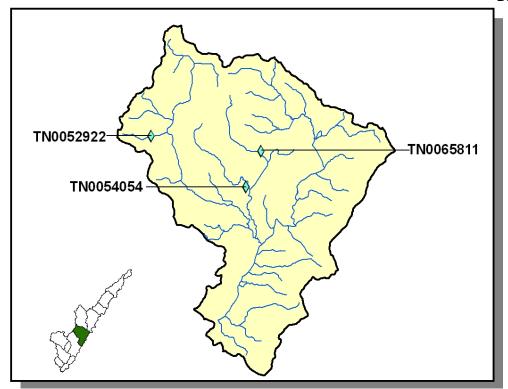


Figure 4-69. Location of permitted MINING facilities in Subwatershed 060300010201. More information is provided in Appendix IV.

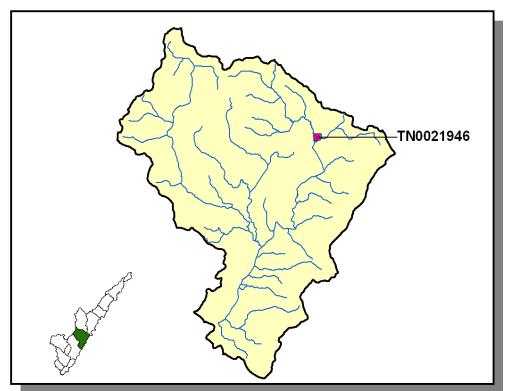


Figure 4-70. Location of permitted MUNICIPAL and INDUSTRIAL facilities in subwatershed 060300010201. More information, including the name of the facility is provided in Appendix IV.

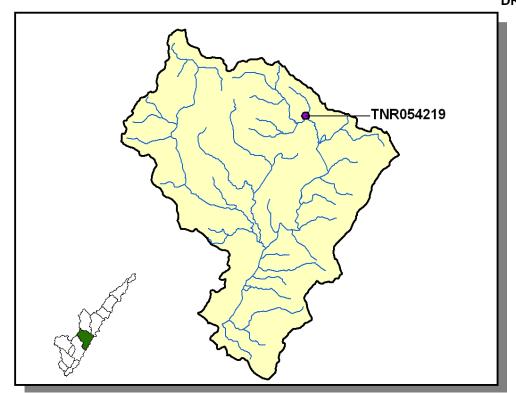


Figure 4-71. Location of TMSP (Tennessee Multi Sector Permit) Sites in Subwatershed 060300010201. More information is provided in Appendix IV.

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#### 4.2.G.iv. Nonpoint Source Contributions.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Marion	4,424	8,939	311	246	279	
Sequatchie	2,763	6,739	221	6		

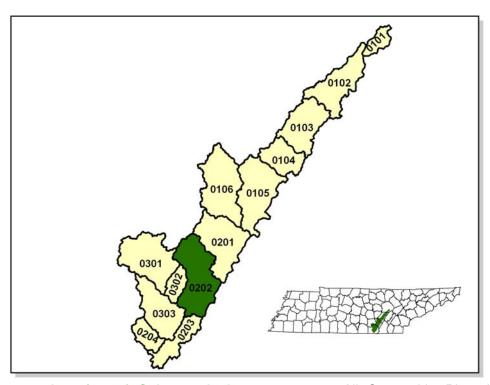
Table 4-38. Summary of Livestock Count Estimates by County. According to the 1997 Census of Agriculture (<a href="http://www.agcensus.usda.gov/">http://www.agcensus.usda.gov/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

CROPS	TONS/ACRE/YEAR
Other Vegetable and Truck Crop	7.28
Soybeans (Row Crops)	4.56
Corn (Row Crops)	2.52
Grass Forbs Legumes Mixed (Pastureland)	1.10
Grass (Pastureland)	1.07
Grass (Hayland)	0.47
Other (Horticultural)	0.29
Legume Grass (Hayland)	0.22
Farmsteads and Ranch Headquarters	0.11

Table 4-39. Annual Estimated Total Soil Loss in Subwatershed 060200040201.

#### 4.2.H. 060200040202 (Sequatchie River).

#### 4.2.H.i. General Description.



**Figure 4-72. Location of Subwatershed 060200040202.** All Sequatchie River HUC-12 subwatershed boundaries are shown for reference.

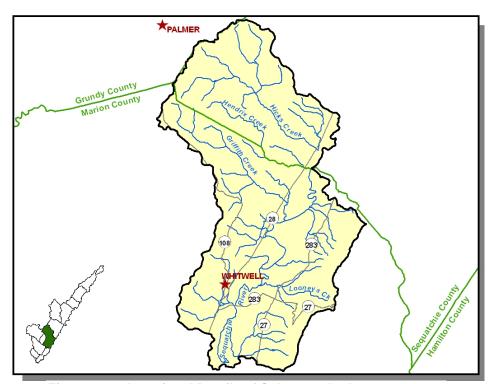


Figure 4-73. Locational Details of Subwatershed 060200040202.

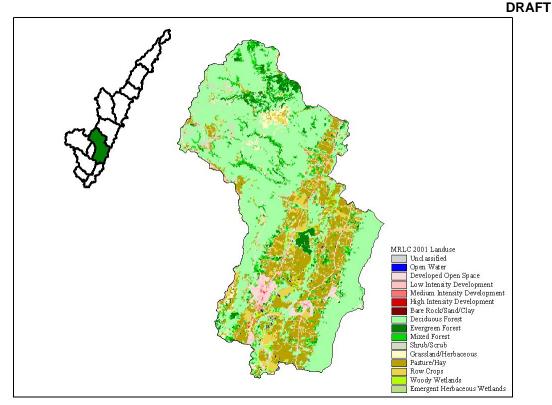


Figure 4-74. Illustration of Land Use Distribution in Subwatershed 060200040202.

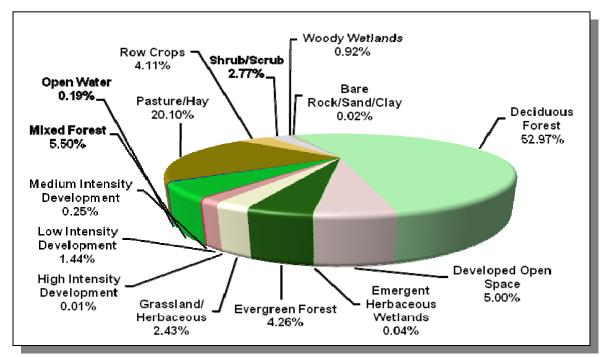


Figure 4-75. Land Use Distribution in Subwatershed 060200040202. More information is provided in Appendix IV.

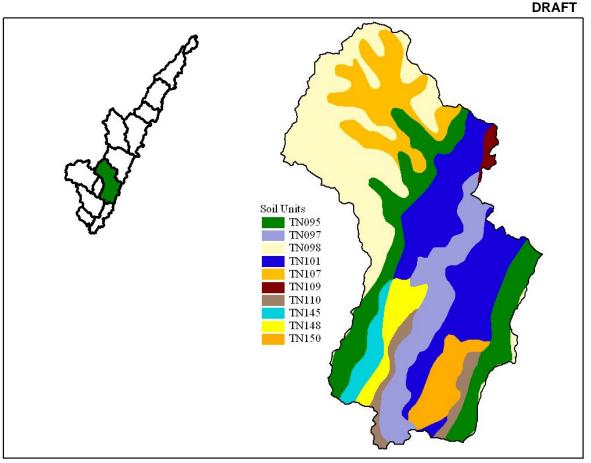


Figure 4-76. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040202.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	В	2.35	5.12	Loam	0.31
TN097	0.00	В	1.62	5.55	Loam	0.32
TN098	1.00	С	3.98	4.82	Loam	0.32
TN101	0.00	В	1.71	5.39	Loam	0.35
TN107	1.00	С	6.34	4.84	Loam	0.28
TN109	0.00	В	8.40	5.01	Sandy Loam	0.28
TN110	0.00	В	2.22	4.96	Loam	0.31
TN145	0.00	В	1.84	4.83	Loam	0.27
TN148	5.00	В	1.37	4.84	Loam	0.28
TN150	6.00	С	1.68	5.63	Silty Loam	0.32

Table 4-40. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040202. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION			ESTIMATED POPULATION IN WATERSHED				
County	1990	1997	2000	% of County in Watershed	1990	1997	2000	% Change (1990-2000)
Marion	24,860	26,674	27,776	10.22	2,540	2,725	2,838	11.70
Sequatchie	8,863	10,119	11,370	6.79	602	687	772	28.20
Totals	33,723	36,793	39,146		3,142	3,412	3,610	14.90

Table 4-41. Population Estimates in Subwatershed 060200040202.

				NUMBER OF HO	<b>DUSING UNITS</b>	
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Powells Crossroads	Marion	1,098	395	9	380	6
Whitwell	Marion	1,622	689	62	625	2

Table 4-42. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060200040202.

#### 4.2.H.ii USGS Gaging Stations and STORET Sites.

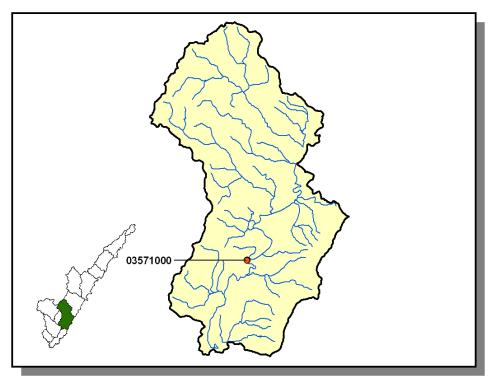


Figure 4-77. Location of USGS Continuous Record Gaging Stations in Subwatershed 060200040202. More information is provided in Appendix IV.

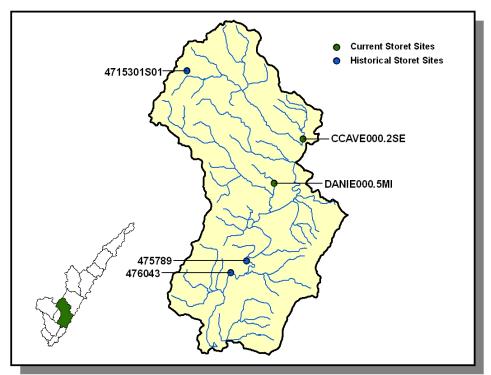


Figure 4-78. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060200040202. More information, including site names and locations, is provided in Appendix IV.

## 4.2.H.iii. Permitted Activities.

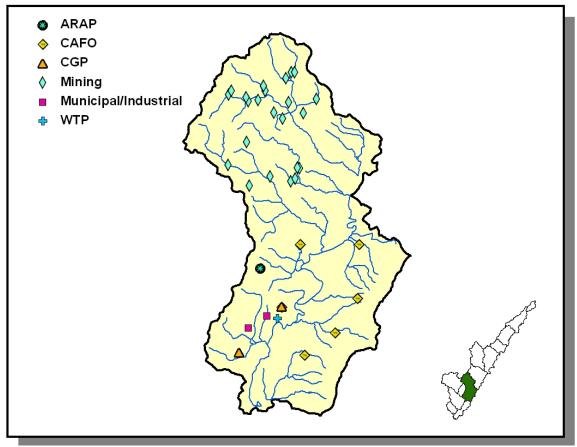


Figure 4-79. Location of Permits Issued in Subwatershed 060200040202. More information, including the names of facilities, is provided in Appendix IV.

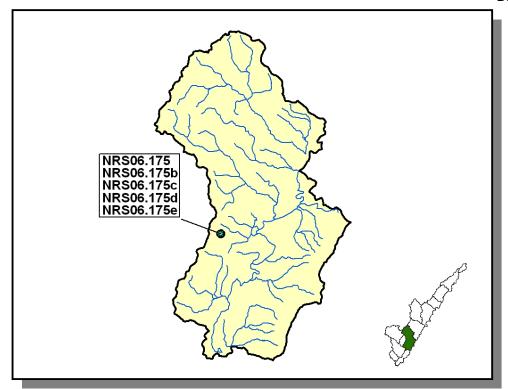


Figure 4-80. Location of ARAP (Aquatic Resource Alteration Permit) Sites in Subwatershed 060300010202. More information is provided in Appendix IV.

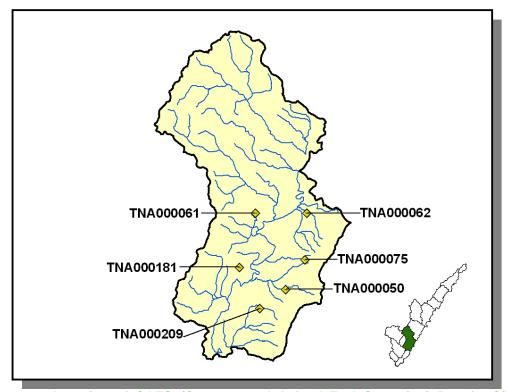


Figure 4-81. Location of CAFO (Concentrated Animal Feel Operation) Permit Sites in Subwatershed 060300010202. More information, including the names of facilities, is provided in Appendix IV.

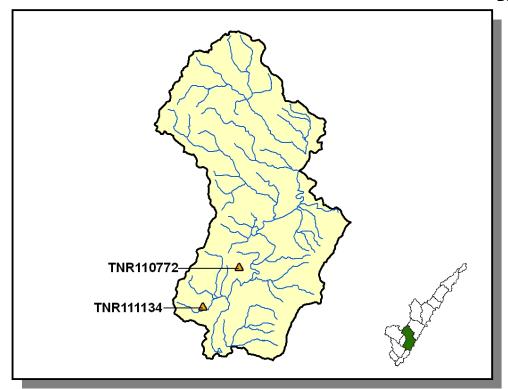


Figure 4-82. Location of CGP (Construction General Permit) Sites in Subwatershed 060300010202. More information is provided in Appendix IV.

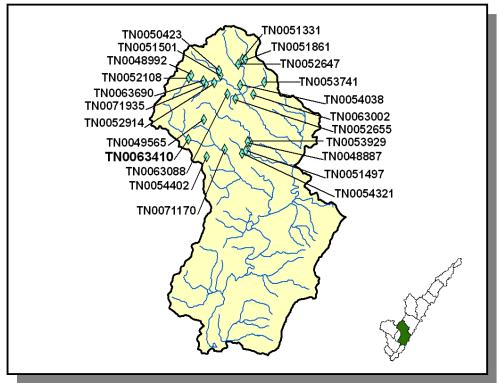


Figure 4-83. Location of permitted MINING facilities in Subwatershed 060300010202. More information is provided in Appendix IV.

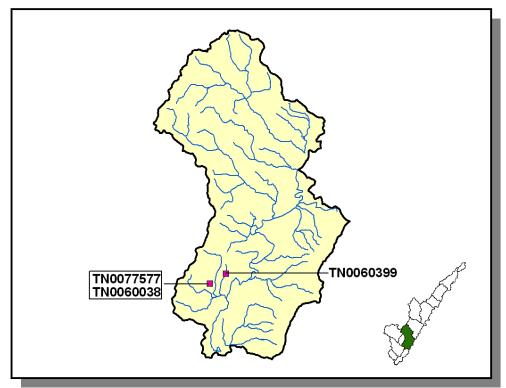


Figure 4-84. Location of permitted MUNICIPAL and INDUSTRIAL facilities in subwatershed 060300010202. More information, including the name of the facility is provided in Appendix IV.

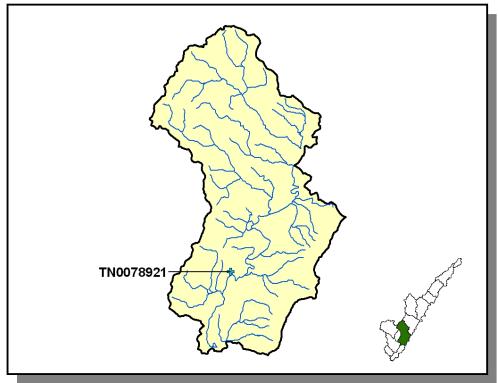


Figure 4-85. Location of Active WTP Facilities in Subwatershed 060300010202. More information, including the names of facilities, is provided in Appendix IV.

#### 4.2.H.iv. Nonpoint Source Contributions.

LIVESTOCK COUNTS							
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep	
Marion	4,424	8,939	311	246	279		
Sequatchie	2,763	6,739	221	6			

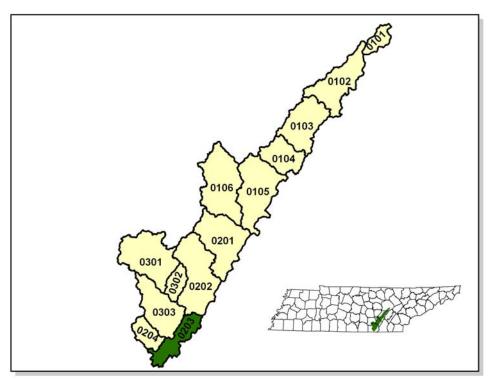
Table 4-43. Summary of Livestock Count Estimates by County. According to the 1997 Census of Agriculture (<a href="http://www.agcensus.usda.gov/">http://www.agcensus.usda.gov/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

CROPS	TONS/ACRE/YEAR
Other Vegetable and Truck Crop	7.28
Soybeans (Row Crops)	4.56
Corn (Row Crops)	3.28
Grass (Pastureland)	0.74
Grass Forbs Legumes Mixed (Pastureland)	0.51
Grass (Hayland)	0.47
Other (Horticultural)	0.29
Legume Grass (Hayland)	0.22
Farmsteads and Ranch Headquarters	0.17

Table 4-44. Annual Estimated Total Soil Loss in Subwatershed 060200040202.

# 4.2.I. 060200040203 (Sequatchie River).

# 4.2.I.i. General Description.



**Figure 4-86. Location of Subwatershed 060200040203.** All Sequatchie River HUC-12 subwatershed boundaries are shown for reference.

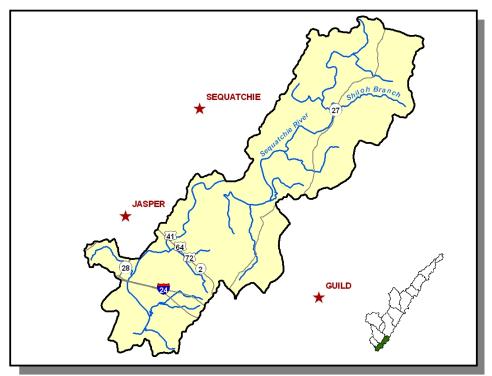


Figure 4-87. Locational Details of Subwatershed 060200040203.

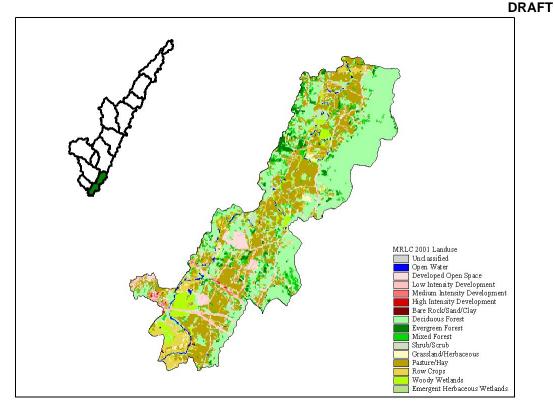


Figure 4-88. Illustration of Land Use Distribution in Subwatershed 060200040203.

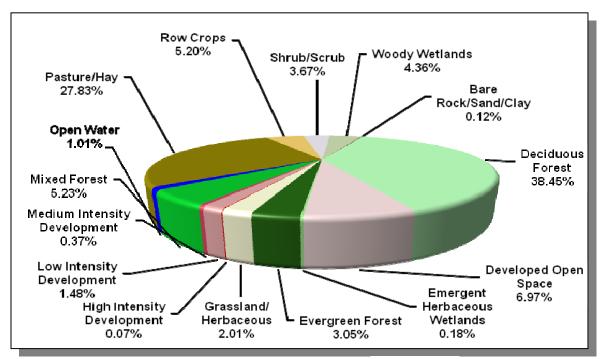


Figure 4-89. Land Use Distribution in Subwatershed 060200040203. More information is provided in Appendix IV.

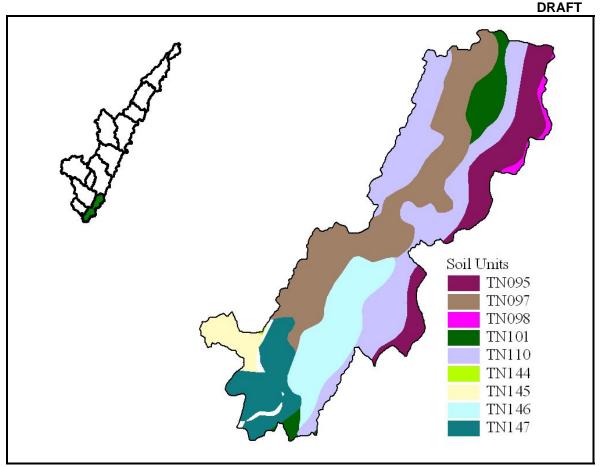


Figure 4-90. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040203.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	В	2.35	5.12	Loam	0.31
TN097	0.00	В	1.62	5.55	Loam	0.32
TN098	1.00	С	3.98	4.82	Loam	0.32
TN101	0.00	В	1.71	5.39	Loam	0.35
TN110	0.00	В	2.22	4.96	Loam	0.31

Table 4-45. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040203. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION					N WATER	PULATION SHED	
County	1990 1997 2000		% of County in Watershed	1990	1997 2000		% Change (1990-2000)	
Marion	24,860	26,674	27,776	5.76	1,433	1,538	1,601	11.70

Table 4-46. Population Estimates in Subwatershed 060200040203.

			NUMBER OF HOUSING UNITS					
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other		
Jasper	Marion	2,780	1,199	966	225	8		
Kimball	Marion	1,243	507	54	448	5		
Total		4,023	1,706	1,020	673	13		

Table 4-47. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060200040203.

# 4.2.I.ii USGS Gaging Stations and STORET Sites.

There are no USGS continuous record gaging stations located in subwatershed 060200040203.

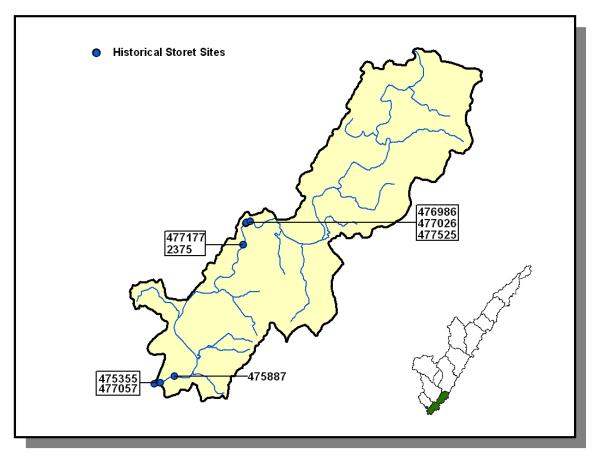


Figure 4-91. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060200040203. More information, including site names and locations, is provided in Appendix IV.

# 4.2.I.iii. Permitted Activities.

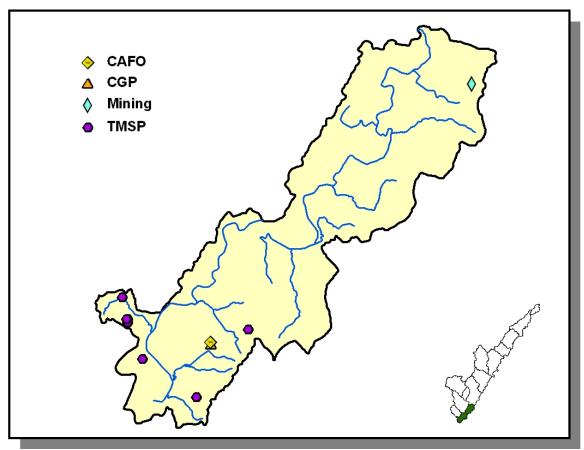


Figure 4-92. Location of Permits Issued in Subwatershed 060200040203. More information, including the names of facilities, is provided in Appendix IV.

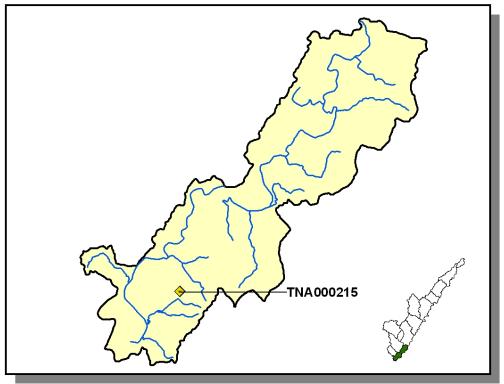


Figure 4-93. Location of CAFO (Concentrated Animal Feel Operation) Permit Sites in Subwatershed 060300010203. More information, including the names of facilities, is provided in Appendix IV.



Figure 4-94. Location of CGP (Construction General Permit) Sites in Subwatershed 060300010203. More information is provided in Appendix IV.

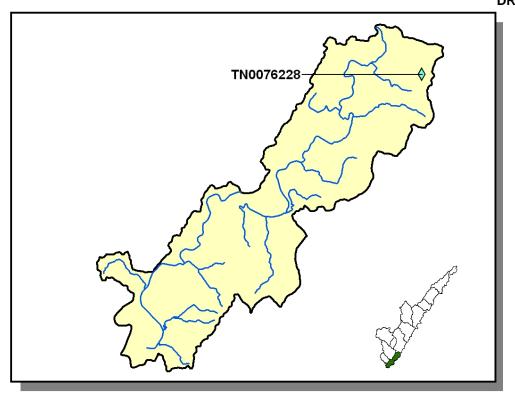


Figure 4-95. Location of permitted MINING facilities in Subwatershed 060300010203. More information is provided in Appendix IV.

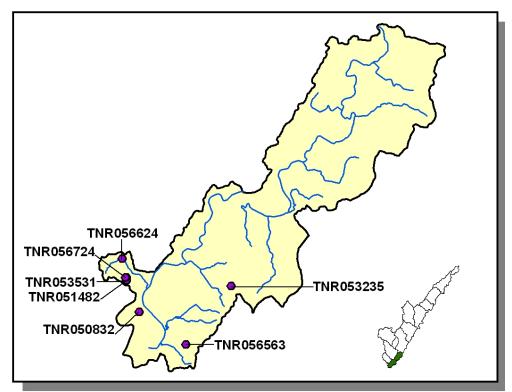


Figure 4-96. Location of TMSP (Tennessee Multi Sector Permit) Sites in Subwatershed 060300010203. More information is provided in Appendix IV.

# 4.2.I.iv. Nonpoint Source Contributions.

LIVESTOCK COUNTS								
County Beef Cow Cattle Milk Cow Chickens (Layers) Hogs Sheep								
Marion	4,424	8,939	311	246	279			

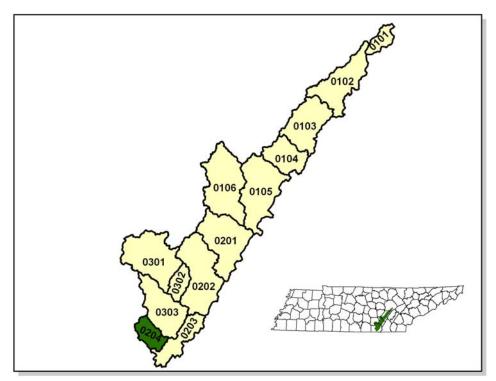
Table 4-48. Summary of Livestock Count Estimates by County. According to the 1997 Census of Agriculture (<a href="http://www.agcensus.usda.gov/">http://www.agcensus.usda.gov/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

CROPS	TONS/ACRE/YEAR
Other Vegetable and Truck Crop	7.28
Soybeans (Row Crops)	4.56
Corn (Row Crops)	3.55
Grass (Pastureland)	0.62
Grass Forbs Legumes Mixed (Pastureland)	0.29
Other (Horticultural)	0.29
Farmsteads and Ranch Headquarters	0.19
Other Vegetable and Truck Crop	7.28
Soybeans (Row Crops)	4.56
Corn (Row Crops)	3.55
Grass (Pastureland)	0.62
Grass Forbs Legumes Mixed (Pastureland)	0.29
Other (Horticultural)	0.29
Farmsteads and Ranch Headquarters	0.19

Table 4-49. Annual Estimated Total Soil Loss in Subwatershed 060200040203.

# 4.2.J. 060200040204 (Town Creek).

# 4.2.J.i. General Description.



**Figure 4-97. Location of Subwatershed 060200040204.** All Sequatchie River HUC-12 subwatershed boundaries are shown for reference.

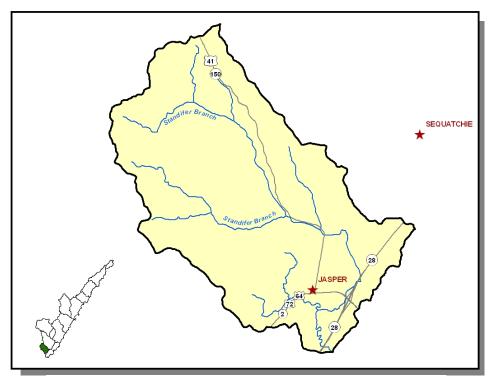


Figure 4-98. Locational Details of Subwatershed 060200040204.

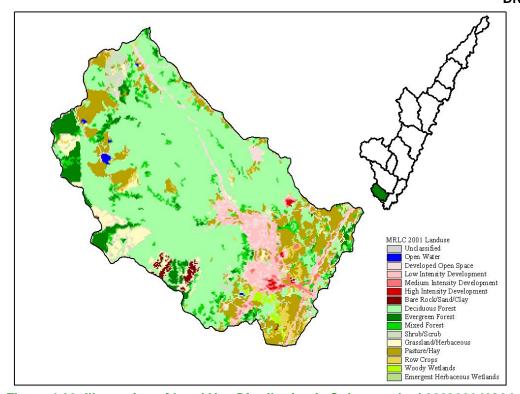


Figure 4-99. Illustration of Land Use Distribution in Subwatershed 060200040204.

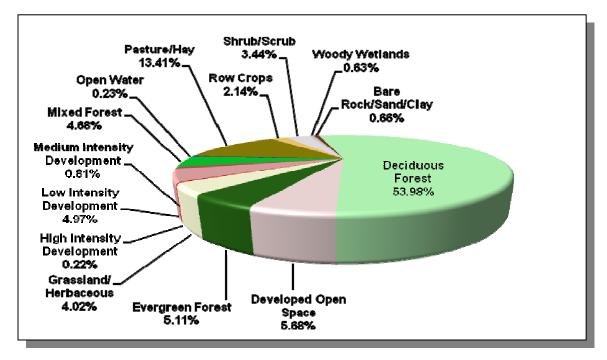


Figure 4-100. Land Use Distribution in Subwatershed 060200040204. More information is provided in Appendix IV.



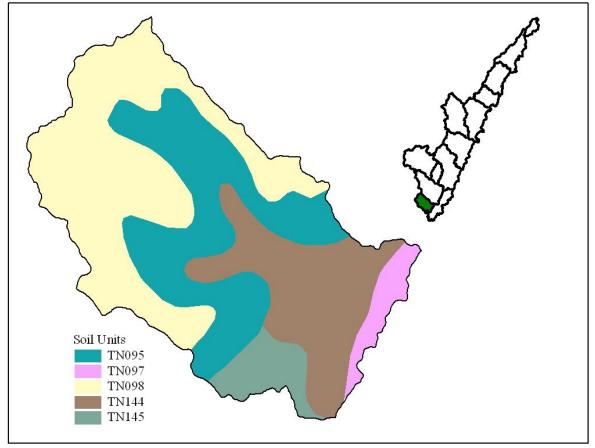


Figure 4-101. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040204.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	В	2.35	5.12	Loam	0.31
TN097	0.00	В	1.62	5.55	Loam	0.32
TN098	1.00	С	3.98	4.82	Loam	0.32
TN144	0.00	В	2.43	5.43	Loam	0.31
TN145	0.00	В	1.84	4.83	Loam	0.27

Table 4-50. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040204. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION			ESTIMATED POPULATION IN WATERSHED				
County	1990	1997	2000	% of County in Watershed				
Marion	24,860	26,674	27,776	3.6	894	960	999	11.7

Table 4-51. Population Estimates in Subwatershed 060200040204.

			NUMBER OF HOUSING UNITS				
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other	
Jasper	Marion	2,780	1,199	966	225	8	

Table 4-52. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060200040204.

# 4.2.J.ii USGS Gaging Stations and STORET Sites.

There are no USGS continuous record gaging stations or STORET sites located in subwatershed 060200040204.

# 4.2.J.iii. Permitted Activities.

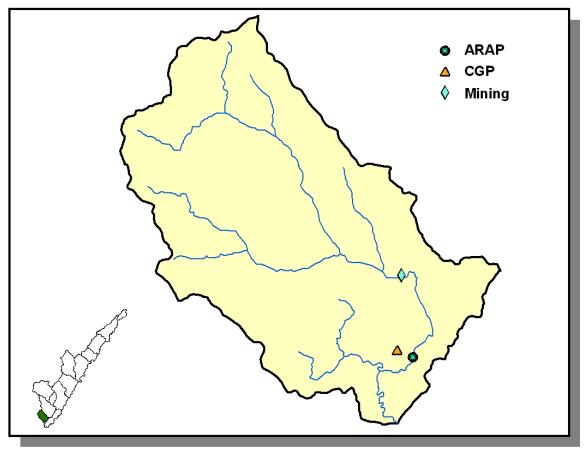


Figure 4-102. Location of Permits Issued in Subwatershed 060200040204. More information, including the names of facilities, is provided in Appendix IV.

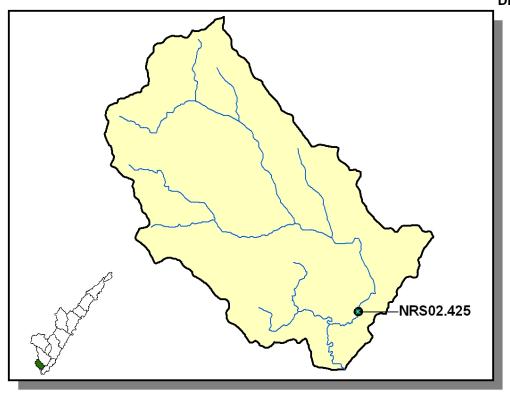


Figure 4-103. Location of ARAP (Aquatic Resource Alteration Permit) Sites in Subwatershed 060300010204. More information is provided in Appendix IV.

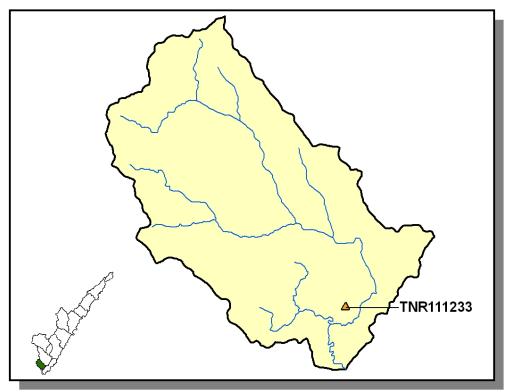


Figure 4-104. Location of CGP (Construction General Permit) Sites in Subwatershed 060300010204. More information is provided in Appendix IV.

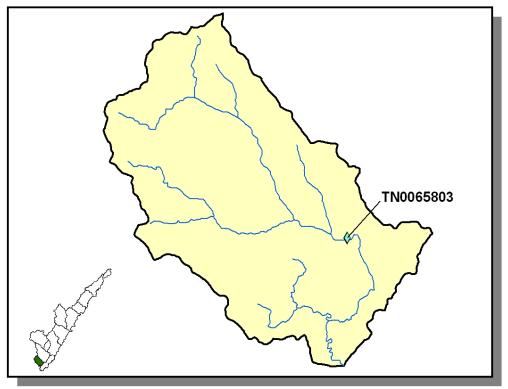


Figure 4-105. Location of permitted MINING facilities in Subwatershed 060300010204. More information is provided in Appendix IV.

# 4.2.J.iv. Nonpoint Source Contributions.

LIVESTOCK COUNTS								
County Beef Cow Cattle Milk Cow Chickens (Layers) Hogs Sheep								
Marion	4,424	8,939	311	246	279			

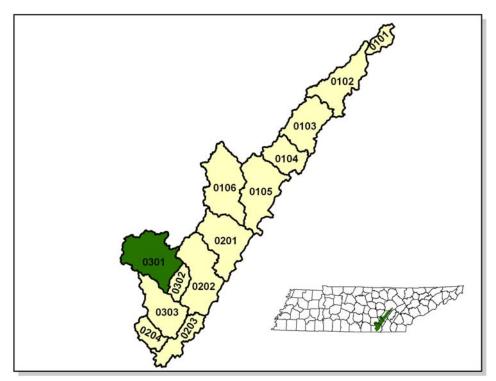
Table 4-53. Summary of Livestock Count Estimates by County. According to the 1997 Census of Agriculture (<a href="http://www.agcensus.usda.gov/">http://www.agcensus.usda.gov/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

CROPS	TONS/ACRE/YEAR
Other Vegetable and Truck Crop	7.28
Soybeans (Row Crops)	4.56
Corn (Row Crops)	3.55
Grass (Pastureland)	0.62
Grass Forbs Legumes Mixed (Pastureland)	0.29
Other (Horticultural)	0.29
Farmsteads and Ranch Headquarters	0.19
Other Vegetable and Truck Crop	7.28
Soybeans (Row Crops)	4.56
Corn (Row Crops)	3.55
Grass (Pastureland)	0.62
Grass Forbs Legumes Mixed (Pastureland)	0.29
Other (Horticultural)	0.29
Farmsteads and Ranch Headquarters	0.19

Table 4-54. Annual Estimated Total Soil Loss in Subwatershed 060200040204.

# 4.2.K. 060200040301 (Little Sequatchie River, Upper).

# 4.2.K.i. General Description.



**Figure 4-106. Location of Subwatershed 060200040301.** All Sequatchie River HUC-12 subwatershed boundaries are shown for reference.

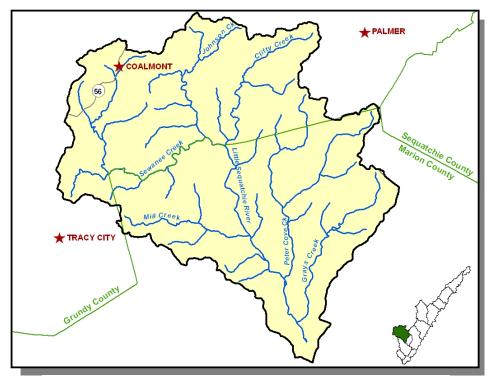


Figure 4-107. Locational Details of Subwatershed 060200040301.

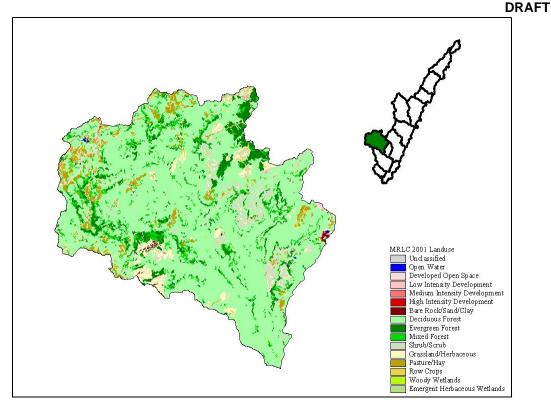


Figure 4-108. Illustration of Land Use Distribution in Subwatershed 060200040301.

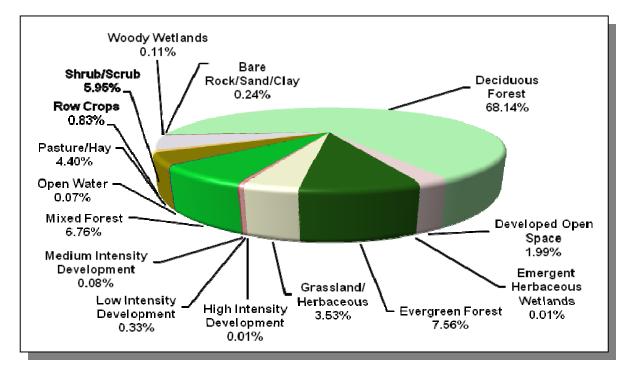


Figure 4-109. Land Use Distribution in Subwatershed 060200040301. More information is provided in Appendix IV.



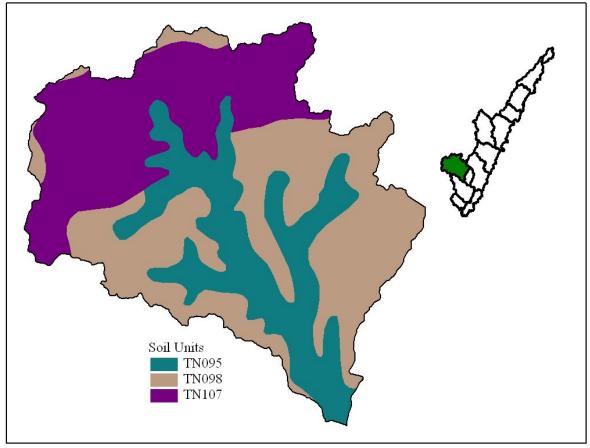


Figure 4-110. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040301.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
			,			
TN095	0.00	В	2.35	5.12	Loam	0.31
TN098	1.00	С	3.98	4.82	Loam	0.32
TN107	1.00	С	6.34	4.84	Loam	0.28
TN144	0.00	В	2.43	5.43	Loam	0.31

Table 4-55. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040301. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION					NATED PC	PULATION SHED	
County	1990	1997	2000	% of County in Watershed	1990	1997	2000	% Change (1990-2000)
Grundy	13,362	14,012	14,332	7.08	946	992	1,015	7.30
Marion	24,860	26,674	27,776	7.57	1,881	2,018	2,102	11.70

Table 4-56. Population Estimates in Subwatershed 060200040301.

			NUMBER OF HOUSING UNITS				
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other	
Coalmont	Grundy	857	300	4	268	28	
Gruetli-Laager	Grundy	1810	680	15	633	32	
Total		2,667	980	19	901	60	

Table 4-57. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060200040301.

# 4.2.K.ii USGS Gaging Stations and STORET Sites.

There are no USGS continuous record gaging stations located in subwatershed 060200040301.

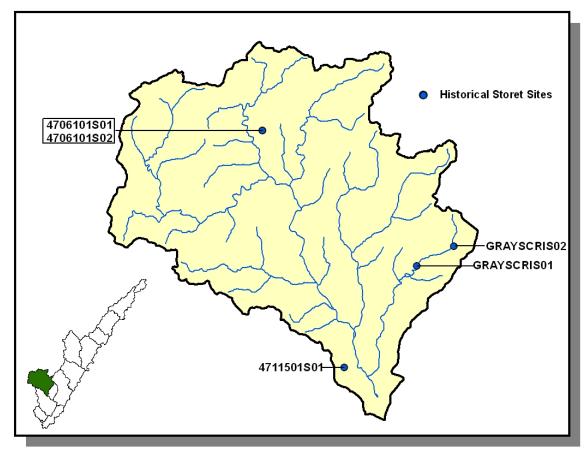


Figure 4-111. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060200040301. More information, including site names and locations, is provided in Appendix IV.

# 4.2.K.iii. Permitted Activities.

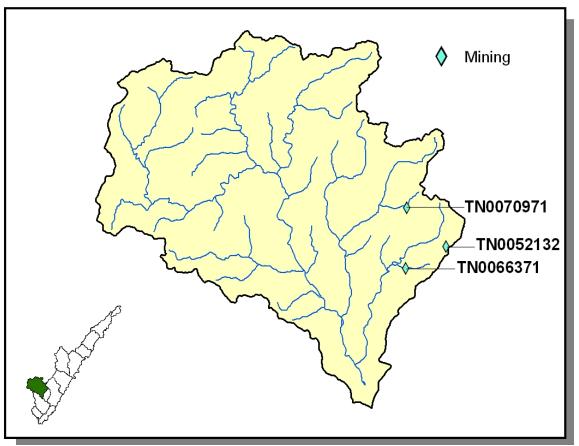


Figure 4-112. Location of Permits Issued in Subwatershed 060200040301. More information, including the names of facilities, is provided in Appendix IV.

#### 4.2.K.iv. Nonpoint Source Contributions.

LIVESTOCK COUNTS										
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep				
Grundy	3,276	7,673	466	68,155	1,761					
Marion	4,424	8,939	311	246	279					

Table 4-58. Summary of Livestock Count Estimates by County. According to the 1997 Census of Agriculture (<a href="http://www.agcensus.usda.gov/">http://www.agcensus.usda.gov/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	INVEN	ITORY	REMOVA	AL RATE
	Forest Land Timber Land		Growing Stock	Sawtimber
County	(thousand acres) (thousand acres)		(million cubic feet)	(million board feet)
Grundy	174.5	165.9	5.6	17.7

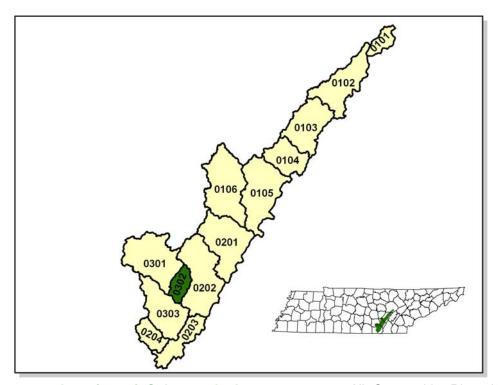
Table 4-59. Forest Acreage and Annual Removal Rates (1987-1994) by County.

TONS/ACRE/YEAR
7.28
4.60
4.17
2.01
0.62
0.39
0.32
0.23
0.19

Table 4-60. Annual Estimated Total Soil Loss in Subwatershed 060200040301

# 4.2.L. 060200040302 (Pockett Creek).

# 4.2.L.i. General Description.



**Figure 4-113. Location of Subwatershed 060200040302.** All Sequatchie River HUC-12 subwatershed boundaries are shown for reference.

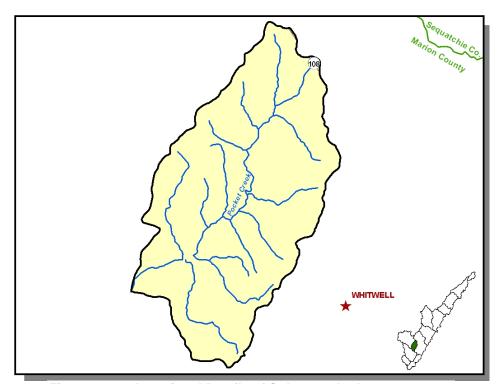


Figure 4-114. Locational Details of Subwatershed 060200040302.

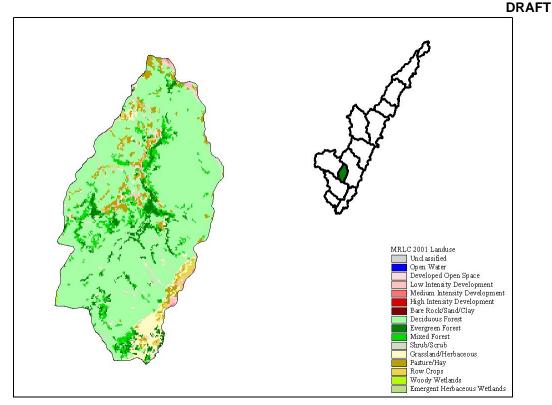


Figure 4-115. Illustration of Land Use Distribution in Subwatershed 060200040302.

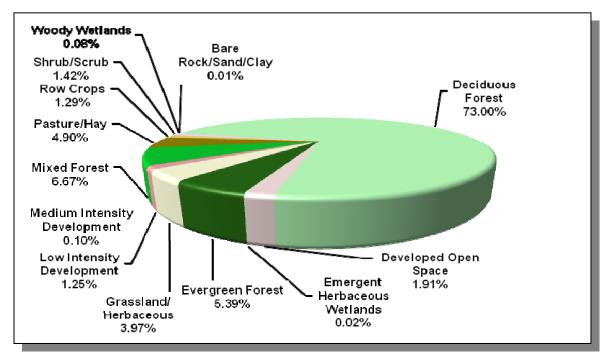


Figure 4-116. Land Use Distribution in Subwatershed 060200040302. More information is provided in Appendix IV.

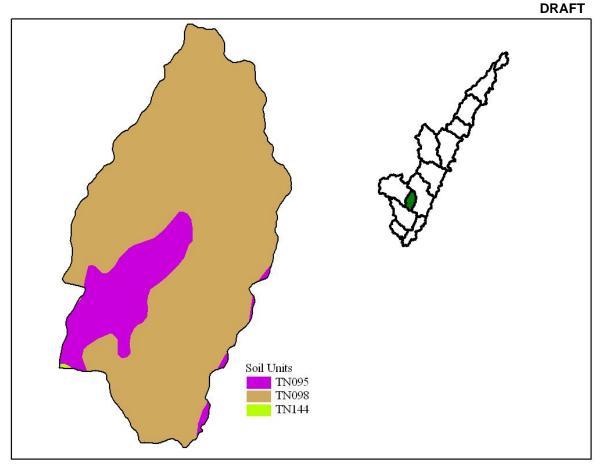


Figure 4-117. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040302.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
_						_
TN095	0.00	В	2.35	5.12	Loam	0.31
TN098	1.00	С	3.98	4.82	Loam	0.32
TN144	0.00	В	2.43	5.43	Loam	0.31

Table 4-61. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040302. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION					N WATER	PULATION SHED	
County	1990	1997	2000	% of County in Watershed	1990	1997	2000	% Change (1990-2000)
Marion	24,860	26,674	27,776	3.02	750	805	838	11.70

Table 4-62. Population Estimates in Subwatershed 060200040302.

# 4.2.L.ii USGS Gaging Stations and STORET Sites.

There are no USGS continuous record gaging stations located in subwatershed 060200040302.

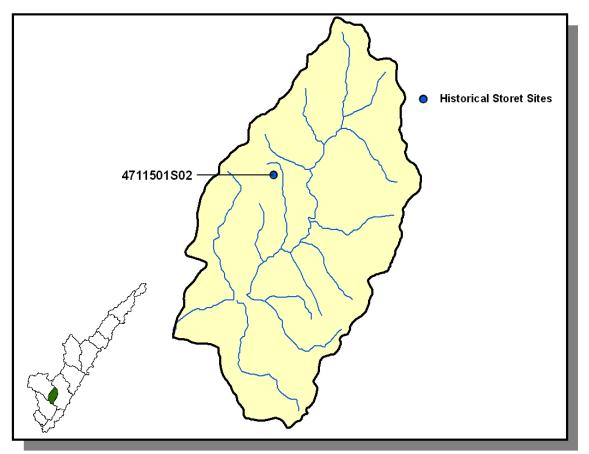


Figure 4-118. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060200040302. More information, including site names and locations, is provided in Appendix IV.

# 4.2.L.iii. Permitted Activities.

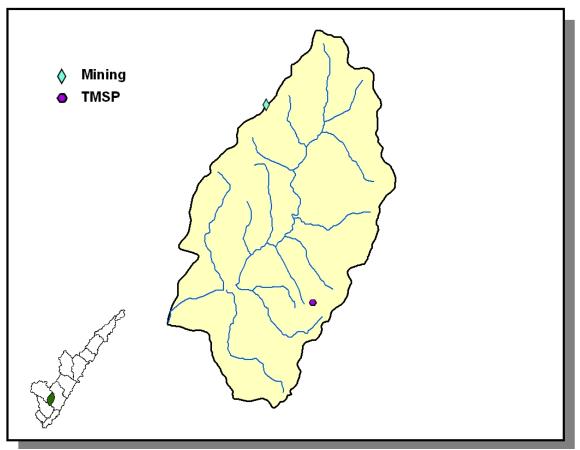


Figure 4-119. Location of Permits Issued in Subwatershed 060200040302. More information, including the names of facilities, is provided in Appendix IV.

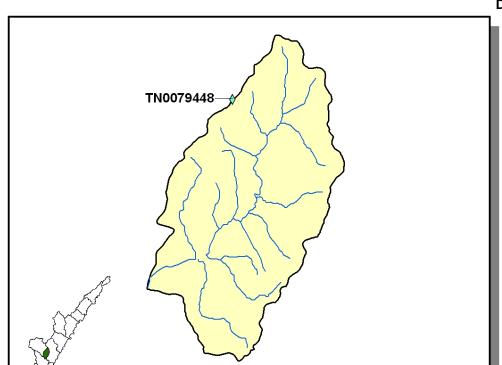


Figure 4-120. Location of permitted MINING facilities in Subwatershed 060300010302. More information is provided in Appendix IV.

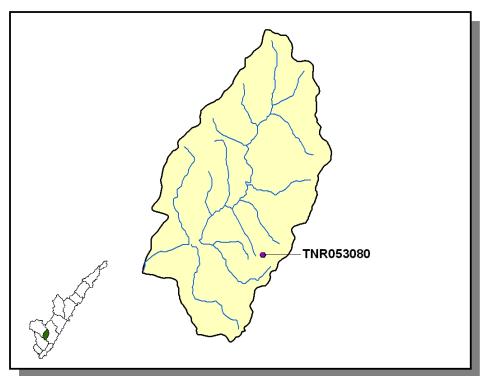


Figure 4-121. Location of TMSP (Tennessee Multi Sector Permit) Sites in Subwatershed 060300010302. More information is provided in Appendix IV.

# 4.2.L.iv. Nonpoint Source Contributions.

LIVESTOCK COUNTS										
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep				
Marion	4,424	8,939	311	246	279					

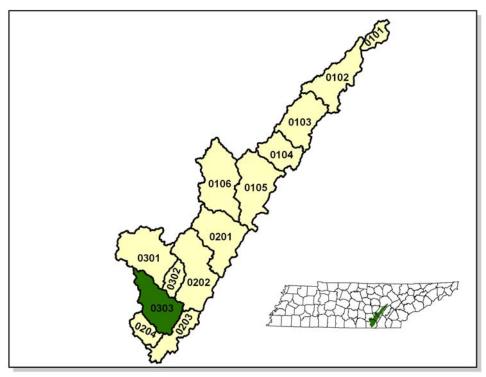
**Table 4-63. Summary of Livestock Count Estimates by County.** According to the 1997 Census of Agriculture (<a href="http://www.agcensus.usda.gov/">http://www.agcensus.usda.gov/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

CROPS	TONS/ACRE/YEAR
Other Vegetable and Truck Crop	7.28
Soybeans (Row Crops)	4.56
Corn (Row Crops)	3.55
Grass (Pastureland)	0.62
Grass Forbs Legumes Mixed (Pastureland)	0.29
Other (Horticultural)	0.29
Farmsteads and Ranch Headquarters	0.19

Table 4-64. Annual Estimated Total Soil Loss in Subwatershed 060200040302.

# 4.2.M. 060200040303 (Little Sequatchie River, Lower).

# 4.2.M.i. General Description.



**Figure 4-122. Location of Subwatershed 060200040303.** All Sequatchie River HUC-12 subwatershed boundaries are shown for reference.

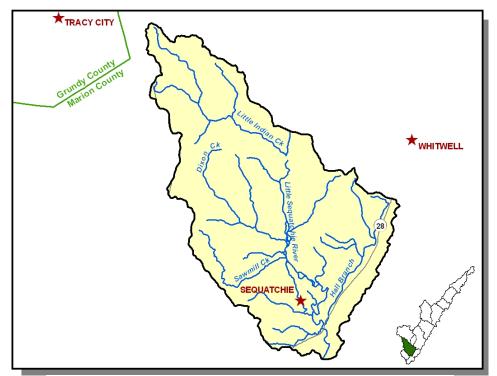


Figure 4-123. Locational Details of Subwatershed 060200040303.

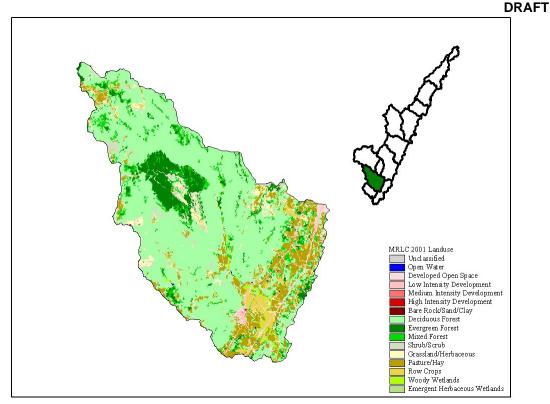


Figure 4-124. Illustration of Land Use Distribution in Subwatershed 060200040303.

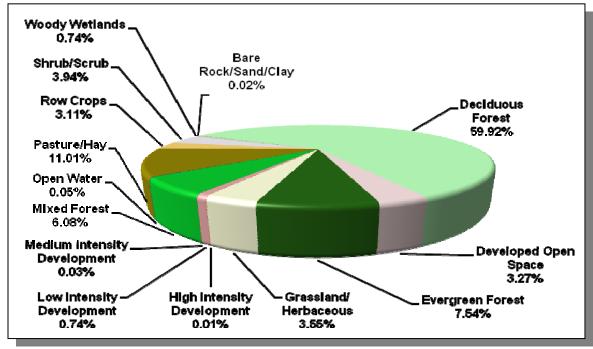


Figure 4-125. Land Use Distribution in Subwatershed 060200040303. More information is provided in Appendix IV.



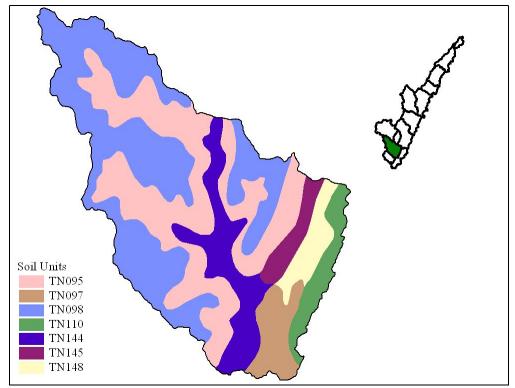


Figure 4-126. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040303.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
		0.100	(marro m)	<b>,</b>		
TN095	0.00	В	2.35	5.12	Loam	0.31
TN097	0.00	В	1.62	5.55	Loam	0.32
TN098	1.00	С	3.98	4.82	Loam	0.32
TN110	0.00	В	2.22	4.96	Loam	0.31
TN144	0.00	В	2.43	5.43	Loam	0.31
TN145	0.00	В	1.84	4.83	Loam	0.27
TN148	5.00	В	1.37	4.84	Loam	0.28

Table 4-65. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040303. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION					IATED PO N WATER	PULATION SHED	
County	1990	1997	2000	% of County in Watershed	1990	1997	2000	% Change (1990-2000)
Marion	24,860	26,674	27,776	9.58	2,382	2,556	2,662	11.80

Table 4-66. Population Estimates in Subwatershed 060200040303.

			NUMBER OF HOUSING UNITS				
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other	
Jasper	Marion	2,780	1,199	966	225	8	

Table 4-67. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060200040303.

# 4.2.M.ii USGS Gaging Stations and STORET Sites.

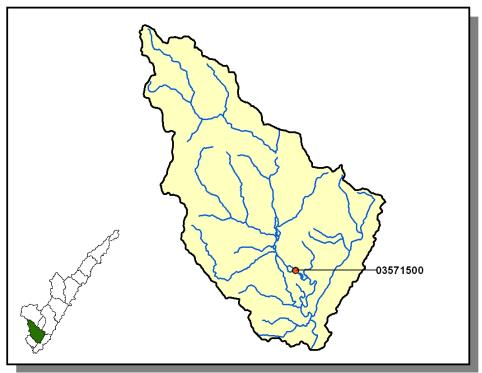


Figure 4-127. Location of USGS Continuous Record Gaging Stations in Subwatershed 060200040303. More information is provided in Appendix IV.

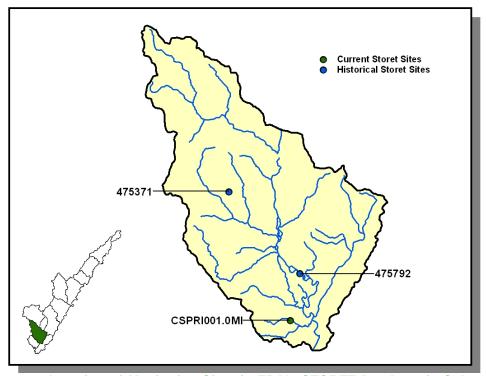


Figure 4-128. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060200040303. More information, including site names and locations, is provided in Appendix IV.

# 4.2.M.iii. Permitted Activities.

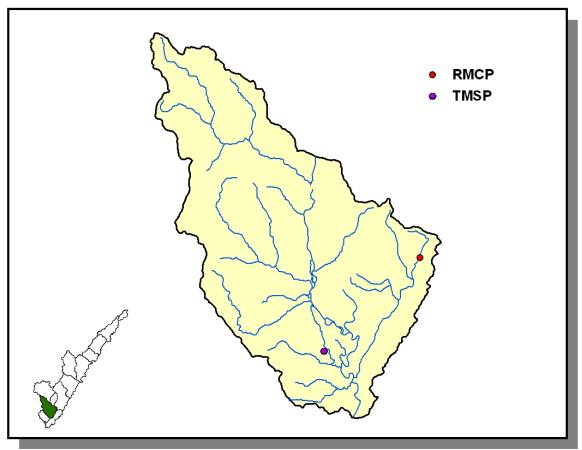


Figure 4-129. Location of Permits Issued in Subwatershed 060200040303. More information, including the names of facilities, is provided in Appendix IV.

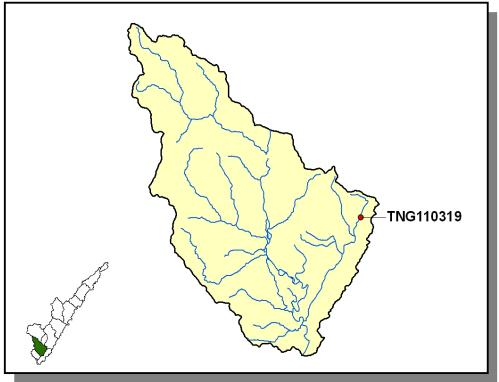


Figure 4-130. Location of RMCP (Ready Mix Concrete Plant) facilities in Subwatershed 060300010303. More information, including the names of facilities, is provided in Appendix IV.

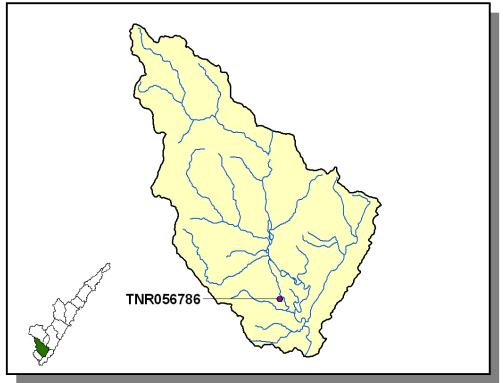


Figure 4-131. Location of TMSP (Tennessee Multi Sector Permit) Sites in Subwatershed 060300010303. More information is provided in Appendix IV.

# 4.2.M.iv. Nonpoint Source Contributions.

LIVESTOCK COUNTS							
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep	
Marion	4,424	8,939	311	246	279		

Table 4-68. Summary of Livestock Count Estimates by County. According to the 1997 Census of Agriculture (<a href="http://www.agcensus.usda.gov/">http://www.agcensus.usda.gov/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

CROPS	TONS/ACRE/YEAR		
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Grass (Pastureland)	0.62		
Grass Forbs Legumes Mixed (Pastureland	0.29		
Other (Horticultural)	0.29		
Farmsteads and Ranch Headquarters	0.19		

Table 4-69. Annual Estimated Total Soil Loss in Subwatershed 060200040303.